



ECOCHARTS

September 2023

INFLATION TRACKER

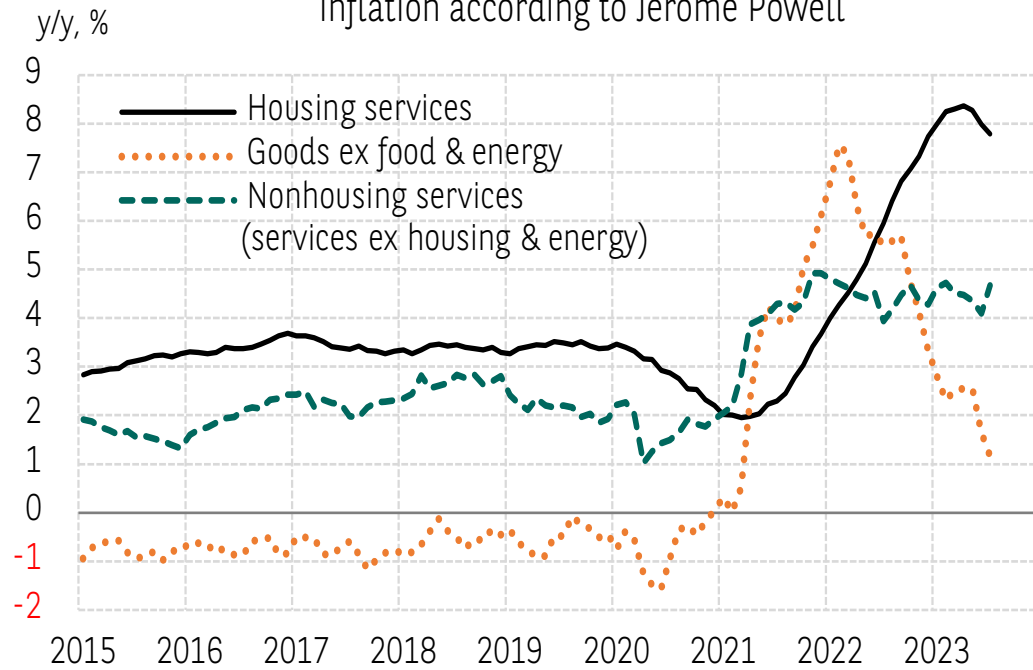


BNP PARIBAS

The bank for a changing world

CHART OF THE MONTH

United States: the three broad components of core PCE inflation according to Jerome Powell



Source: BEA, Macrobond, BNP Paribas

In his opening remarks at Jackson Hole on 25 August 2023, Jerome Powell provided a fairly detailed analysis of US inflation, focusing in particular on the three main components of core PCE* inflation to be monitored in order to track the disinflation process. The chart illustrating his comments is reproduced here.

Two encouraging trends emerge - the sharp fall in core goods inflation and the beginning of the decline in housing services inflation - but also, and above all, a third concerning trend: the absence of a fall in non-housing services inflation, which account for over half of the core PCE. The stability of this curve at a high level since the third quarter 2022 is, in large part, driven by the dynamism of wages.

It illustrates perfectly the stickiness of core inflation. Whether or not the Fed continues to hike rates is conditioned by the evolution of this non-housing component, whose decline depends on the continued easing in labour market tightness, through stronger supply and weaker demand.

*PCE: personal consumption expenditures

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KEY POINTS

- In the UK, the inflation situation remains problematic. Inflation continues to spread, raising concerns about second-round effects. While the consumer price index rose by only 6.8% in July, compared to 7.9% in June, core inflation has now reached a higher level (6.9% in July and June). Almost 53% of goods and services had posted inflation of more than 6% in July, a record proportion. This inflationary momentum is continuing to spread to wages, with wages now rising more than inflation (7.8% y/y, excluding bonuses, over the last 3 months to the end of June). Against this backdrop, the Bank of England was forced to maintain its monetary tightening, bringing its key rate to 5.25% in August (14th consecutive hike). The BoE is expected to continue this movement in September, with an increase which may not be the last.
- In Japan, inflation continues to normalise. As a result, goods and services with falling prices, only accounted for just under 6% of the total in July (compared with 31.5% a year ago), a very low figure for a country that has been showing deflationary trends for almost three decades. Core inflation (excluding energy and fresh food products) reached its highest level in June, at 4.3% y/y, and stabilised in July at this level. The break-even inflation rate rose but remained relatively contained at almost 1.4% on 5 September. Market expectations remain reasonable and are not calling for monetary tightening for the time being.
- In the US, disinflation seems to be slowing. The consumer price index (CPI) and the personal consumption expenditure price index (PCE) reached 3.3% y/y in July, well below levels prevailing a few months ago. But core inflation rebounded in July according to the PCE (from 4.1% to 4.2%) and fell moderately according to the CPI (from 4.9% to 4.7%), after dropping more sharply in the past. The same message was conveyed of a pause in terms of consumer year-ahead inflation expectations, which reached 3.5% in August compared to 3.3% in June (figures from the University of Michigan). Although in our scenario, the Fed is expected to stop raising its key rates, these latest figures raise concerns, which cannot be removed by the break-even inflation rate (2.24% on 5 September).
- Within the eurozone, inflation divergences remain significant in August, with very high inflation in Central Europe, especially in Slovakia and Croatia (9.6% and 8.5% respectively). A rise in inflation was seen in France (5.7%, now above the eurozone average), due to a greater rise than elsewhere in energy prices (gradual reduction in the price cap on electricity). In Germany, inflation stabilised before a more than probable decline in October (base effects). In the eurozone as a whole, the question of persistent inflation remains: inflation and wage curves have not yet crossed, but they might do so from Q3 onwards.
- In all areas, PMI indices on input prices have been suggesting for several months that inflationary tensions in terms of goods should disappear. For the time being, the slight upturn in delivery times is not enough to counteract this positive factor, but changes to these delivery times will need to be monitored, as will inflation in services, where inertia could delay the expected disinflation..

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General dynamics of inflation

Inflation and survey data

Inflation expectations (households, forecasters, markets)

Raw materials

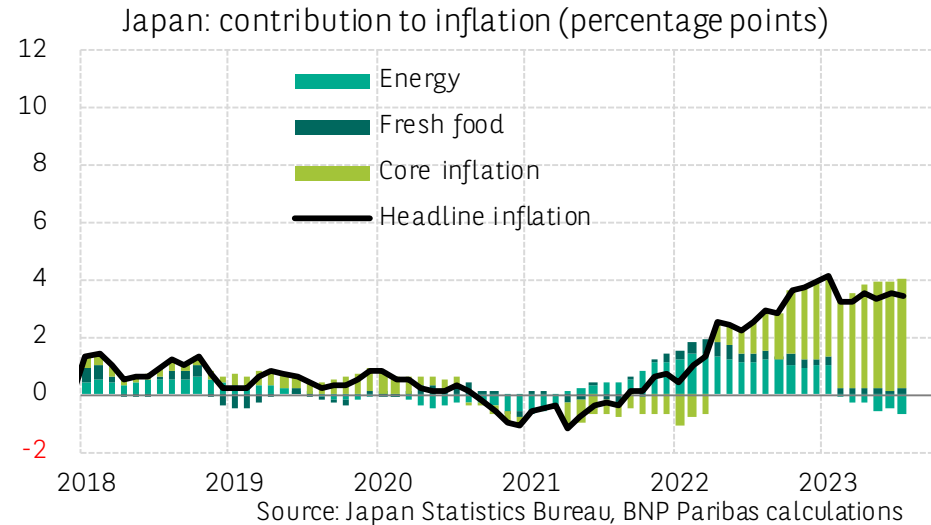
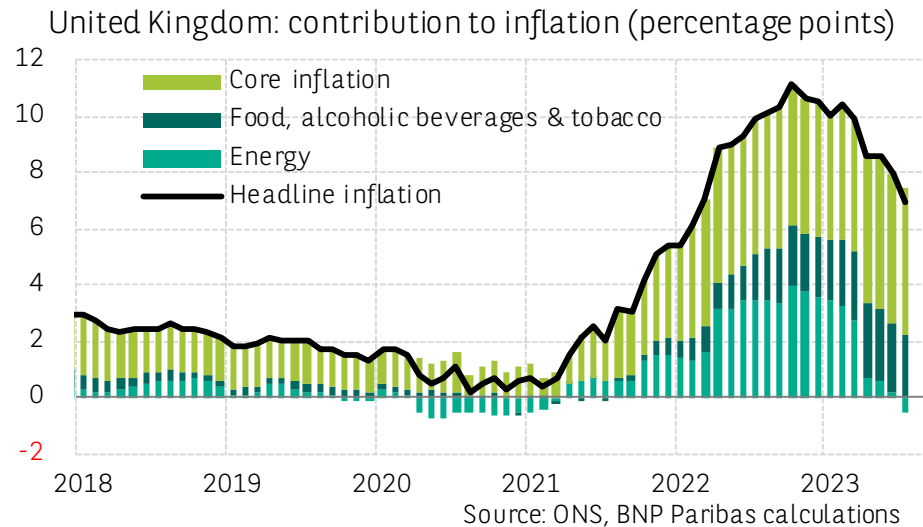
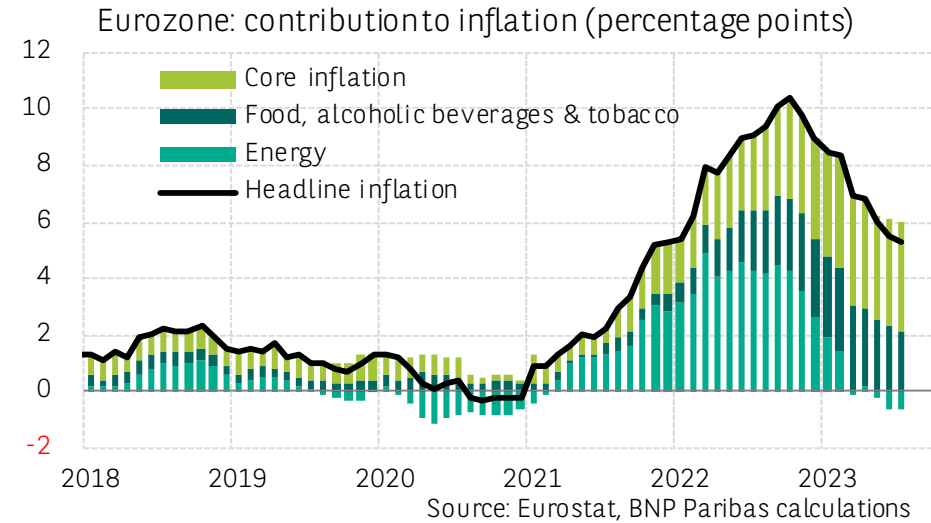
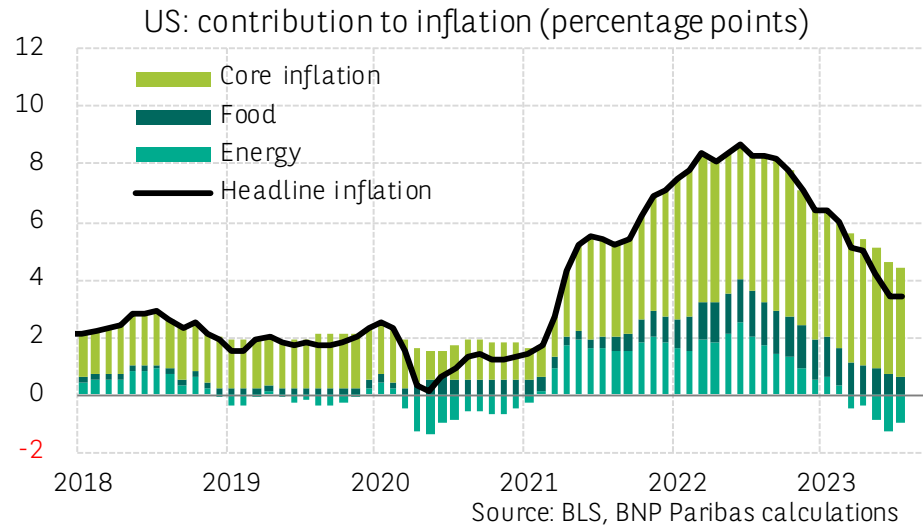
Macroeconomic determinants of inflation (wages, unemployment rate, capacity utilization rate, exchange rate)



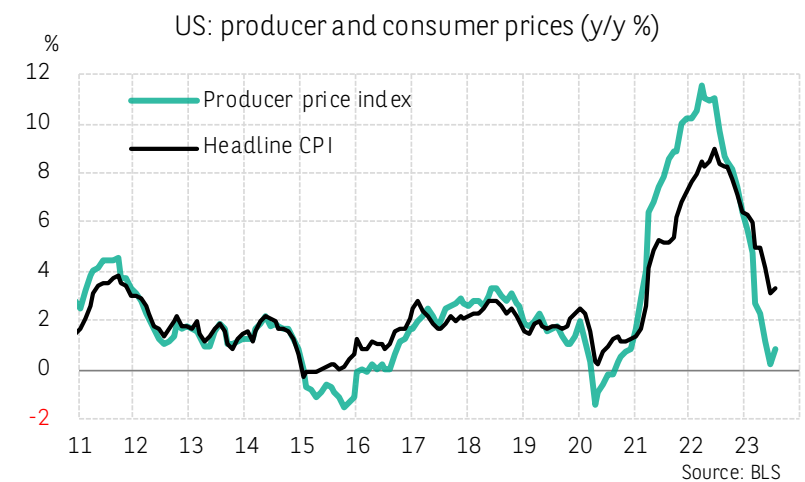
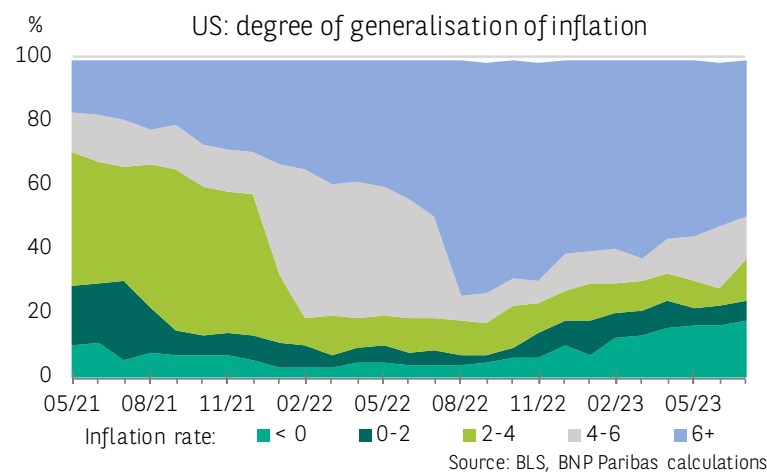
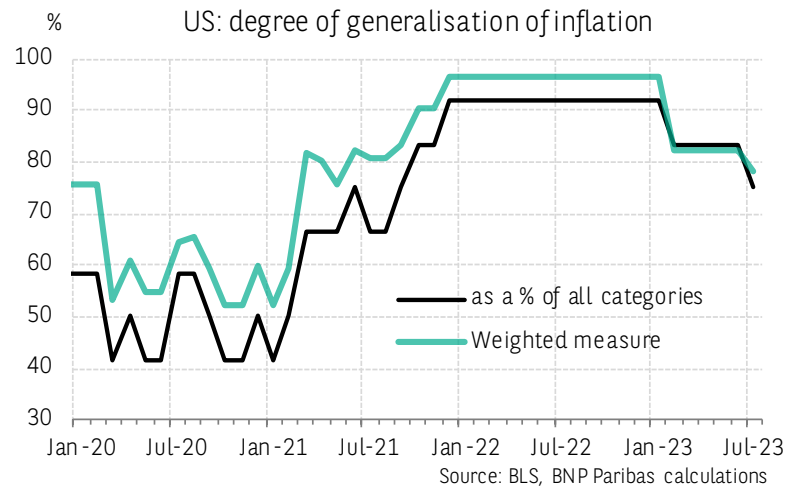
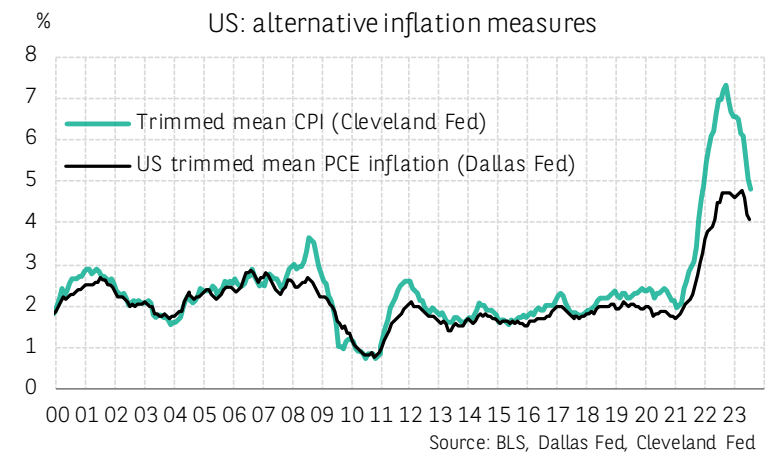
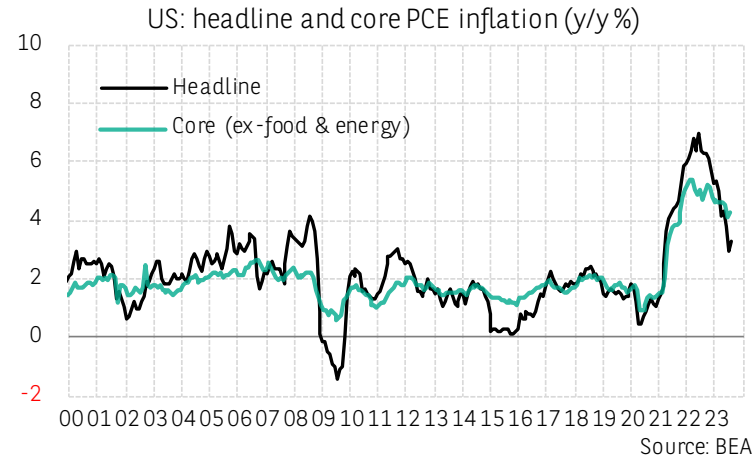
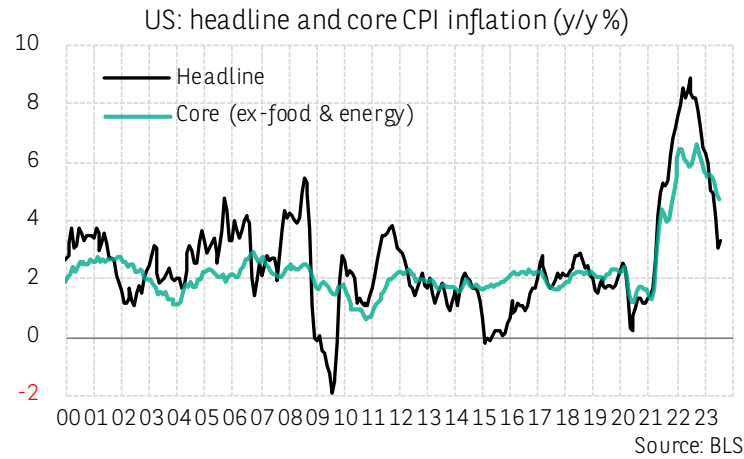
General dynamics of inflation



General dynamics of inflation: decomposition of inflation



Inflation dynamics in the United States: different metrics and degree of generalisation



Note: the black line represents the % of CPI components whose increase is greater than, or equal, to 2%. The hatched green line weights the results by the share of each component in the CPI.

United States inflation heatmap

Difference between the current inflation rate (y/y, %) and the 2010-2019 average

	Weight (%)	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23
Total	100	6.64	6.46	6.44	5.99	5.36	4.67	4.58	4.21	3.22	3.19	2.36	1.32	1.53
Food and non-alcoholic beverages	7.6	11.96	12.34	11.73	11.25	10.76	10.69	10.16	8.96	7.13	5.82	4.45	3.39	2.29
Alcoholic beverages, tobacco and narcotics	1.2	3.07	3.67	3.22	2.82	3.04	2.98	3.37	3.06	2.95	2.68	2.68	2.08	1.96
Clothing and footwear	2.7	5.23	5.11	5.18	3.91	3.13	2.46	2.41	2.56	2.53	2.88	2.90	2.26	2.21
Housing, water, electricity, gas and other fuels	36.1	4.71	5.18	5.52	5.37	5.46	5.87	6.02	5.98	5.54	5.28	4.69	4.18	4.11
Furnishings, household equipment and routine household maintenance	4.0	10.68	10.28	9.60	8.94	8.04	7.04	6.01	5.83	5.22	4.90	3.72	2.97	2.21
Health	7.4	0.39	0.59	0.90	0.61	0.41	0.83	0.19	-0.01	-0.30	-0.18	0.10	0.07	-0.10
Transports	14.5	17.64	13.78	12.37	10.49	6.55	1.82	1.54	0.18	-3.82	-2.51	-5.20	-8.66	-6.47
Communications	3.3	0.40	0.00	-0.62	-0.91	0.48	0.62	1.11	1.13	1.67	1.87	1.73	1.39	1.61
Recreation and culture	6.7	3.97	3.85	4.00	3.71	4.15	4.27	3.95	4.31	4.20	4.45	4.02	3.74	3.35
Education	2.7	0.28	0.31	1.27	1.16	1.39	1.62	0.05	-0.18	0.14	0.03	-0.39	-0.85	-0.64
Restaurants and hotels	7.8	4.64	5.40	5.52	6.06	5.58	5.35	5.41	4.76	4.04	3.43	2.81	2.49	2.41
Miscellaneous goods and services	6.1	4.70	5.74	7.05	6.90	6.57	5.85	5.27	4.41	3.80	3.60	3.53	2.76	2.26

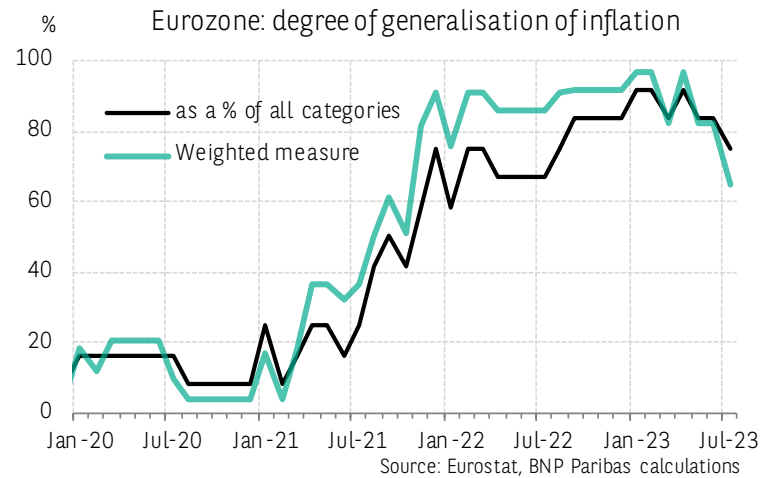
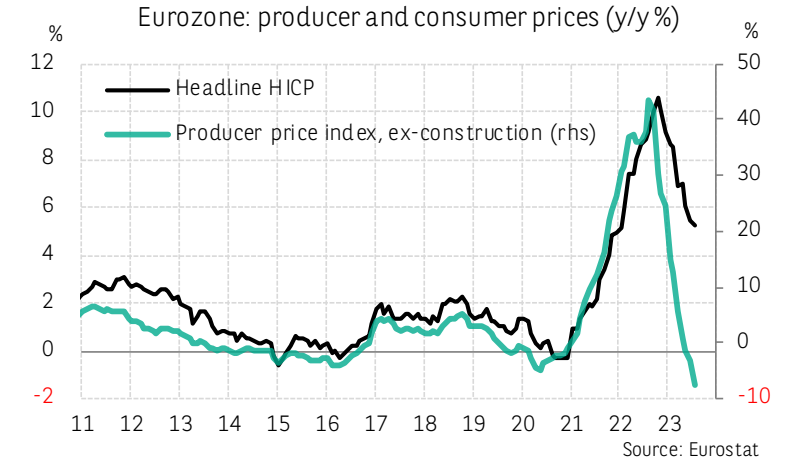
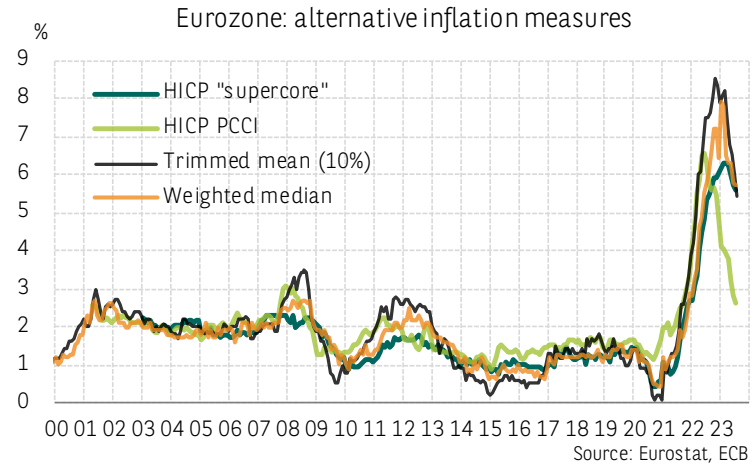
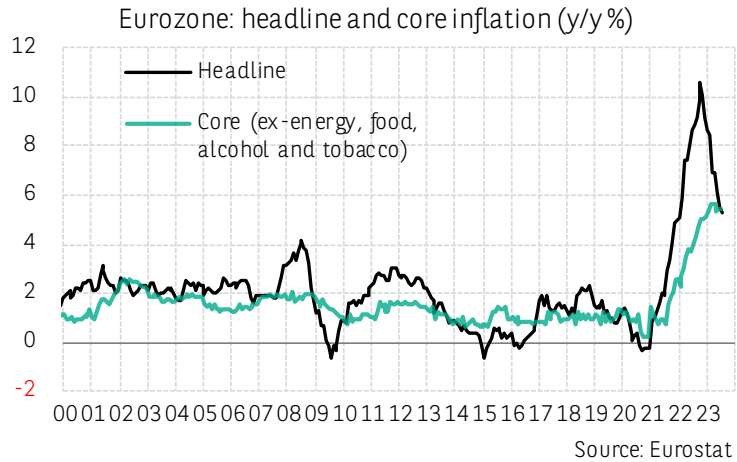
Source: BLS

Difference with the 2010-2019 average

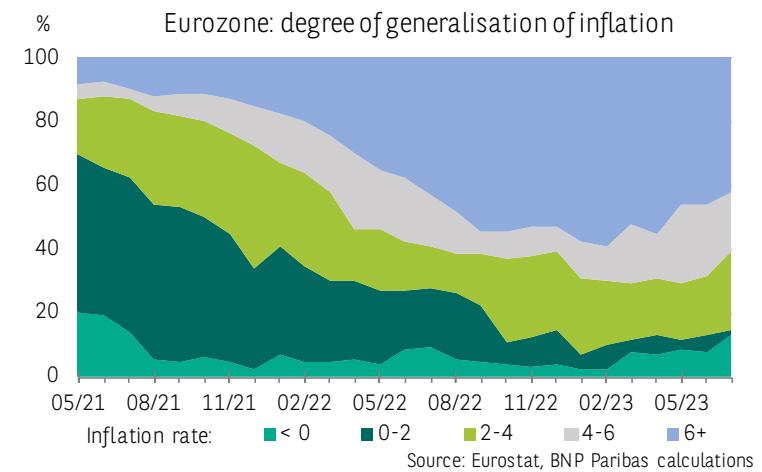
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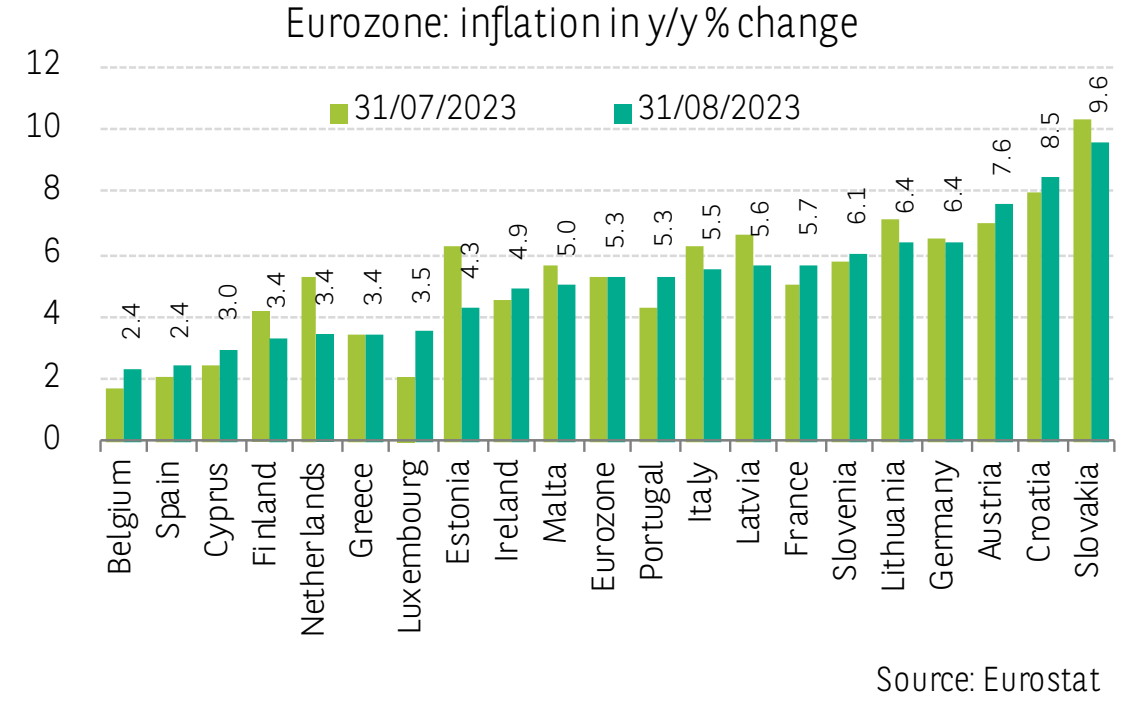
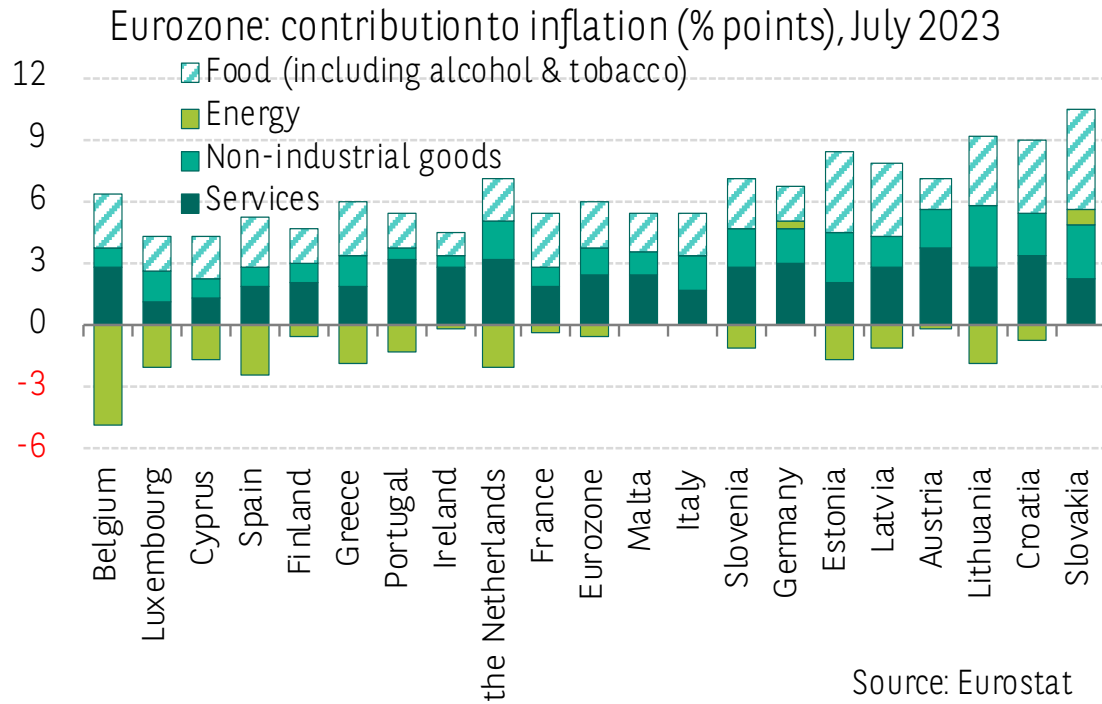
Inflation dynamics in the Eurozone: different metrics and degree of generalisation



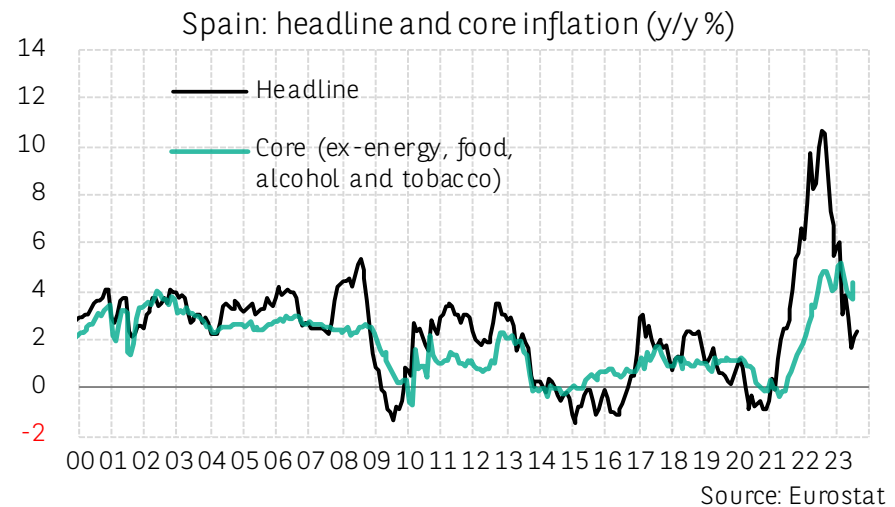
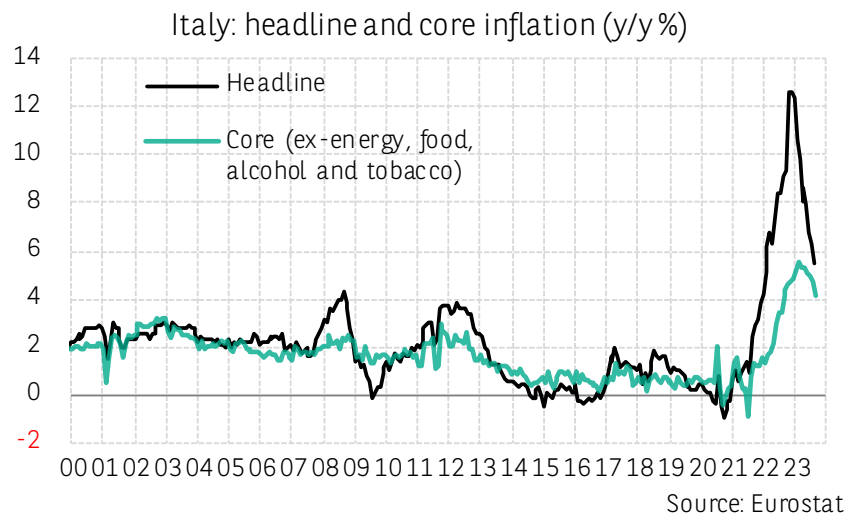
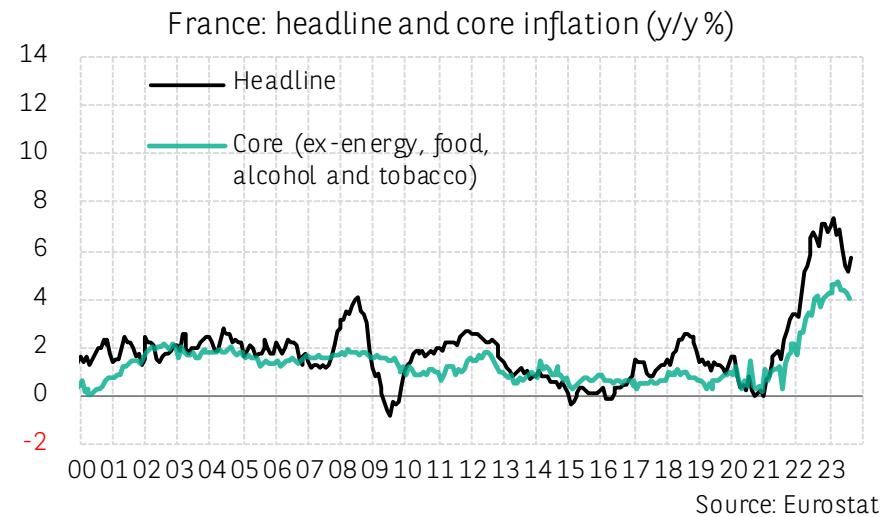
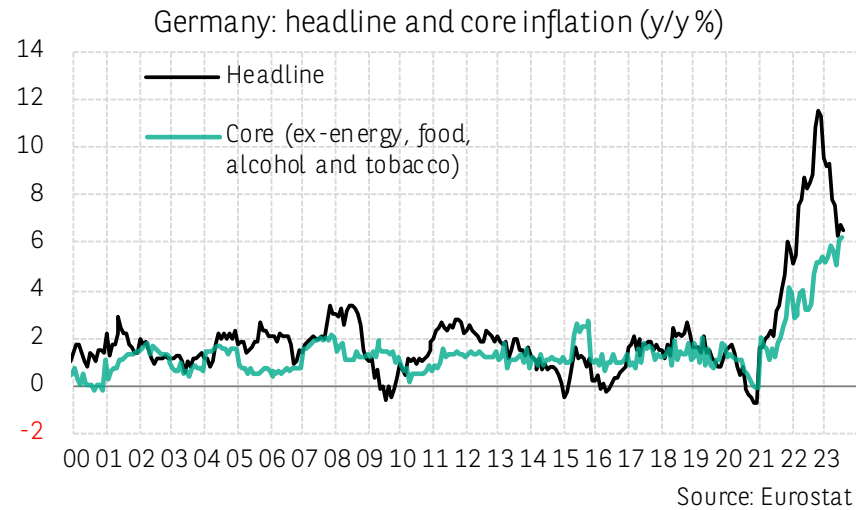
Note: the black line represents the % of CPI components whose increase is greater than, or equal to 2%. The hatched green line weights the results by the share of each component in the CPI.



Inflation dynamics in the Eurozone by country (1)



Inflation dynamics in the Eurozone by country (2)





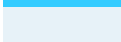
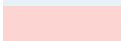


Eurozone inflation heatmap

Difference between the current inflation rate (y/y, %) and the 2010-2019 average

	Weight (%)	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23
Total	100	7.51	7.79	8.57	9.27	8.70	7.84	7.29	7.15	5.53	5.61	4.75	4.17	3.96
Food and non-alcoholic beverages	17	10.04	10.97	12.33	14.02	14.54	14.55	14.83	15.87	16.08	13.54	12.25	11.12	10.13
Alcoholic beverages, tobacco and narcotics	4	0.37	0.68	0.96	1.10	1.46	2.11	2.47	2.96	4.23	4.51	4.46	4.56	4.47
Clothing and footwear	5	-0.53	1.55	2.70	3.29	2.83	3.14	4.42	4.81	4.19	3.59	3.66	3.74	3.27
Housing, water, electricity, gas and other fuels	18	15.90	17.86	19.31	21.38	18.80	14.43	10.13	8.23	2.79	2.98	2.23	0.72	-1.02
Furnishings, household equipment and routine household maintenance	7	6.39	6.81	7.23	7.94	8.08	8.53	8.54	8.32	7.98	7.52	6.69	6.06	5.50
Health	5	0.28	0.24	0.45	0.80	0.72	0.76	1.51	1.64	1.62	1.78	1.83	1.96	1.99
Transports	15	10.90	8.08	9.10	8.13	6.84	5.08	5.31	3.96	-1.24	1.24	-1.75	-2.42	-1.02
Communications	3	0.96	1.03	0.97	0.82	0.73	0.89	1.54	2.09	2.02	2.04	2.25	1.46	1.66
Recreation and culture	8	3.65	4.06	3.89	4.16	4.00	4.76	3.53	4.37	5.58	4.89	5.02	5.12	5.84
Education	1	-1.75	-1.64	2.93	3.22	3.26	3.24	3.37	3.53	3.59	3.68	3.64	3.75	3.68
Restaurants and hotels	8	6.45	6.29	6.68	6.60	6.27	6.44	6.33	6.80	6.68	7.02	6.55	5.86	5.85
Miscellaneous goods and services	10	1.58	1.80	1.95	2.39	2.68	2.81	3.65	3.85	3.86	3.86	3.87	4.11	3.95

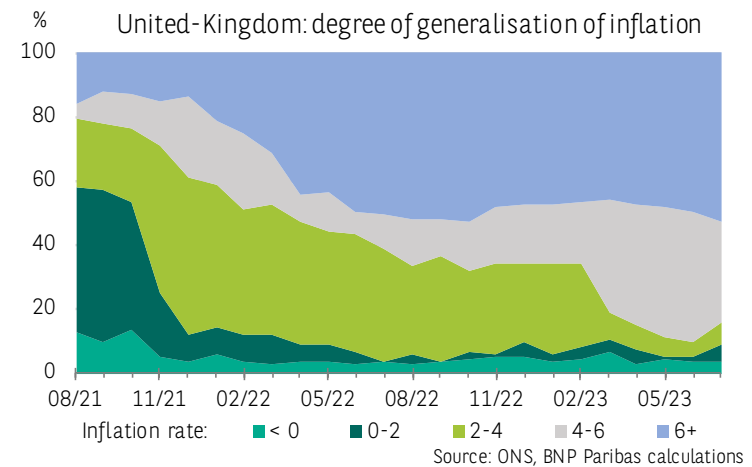
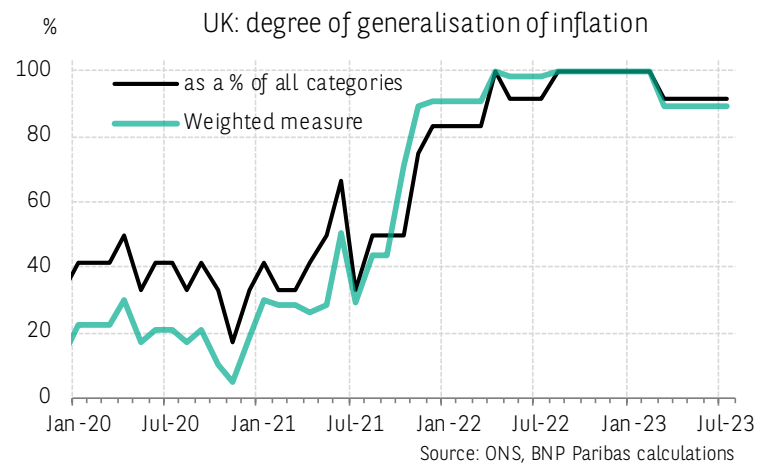
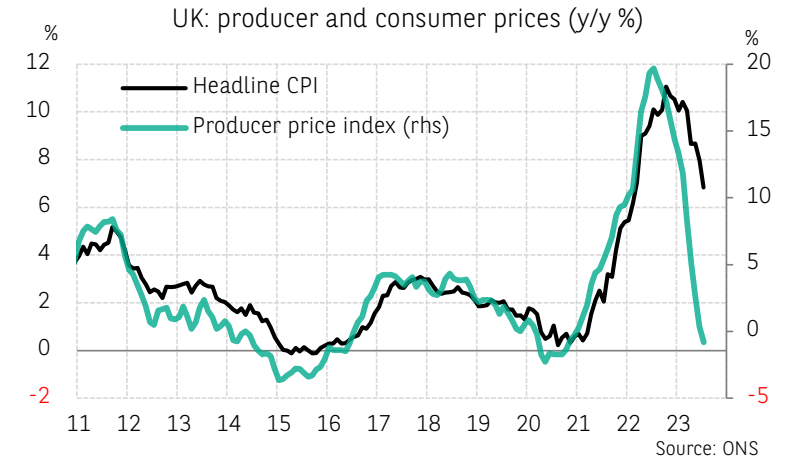
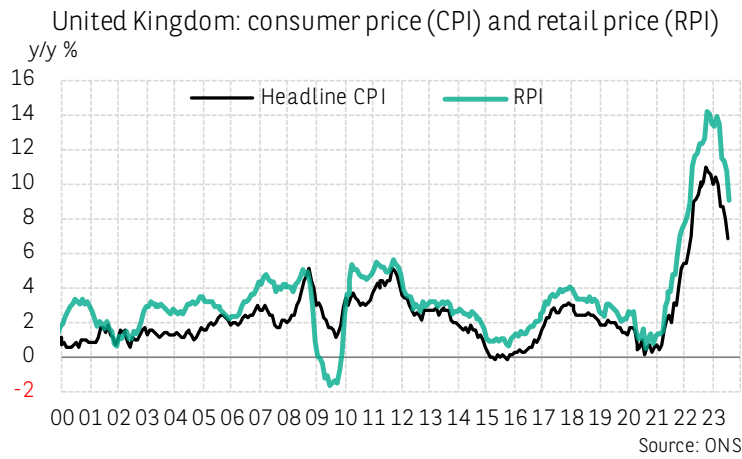
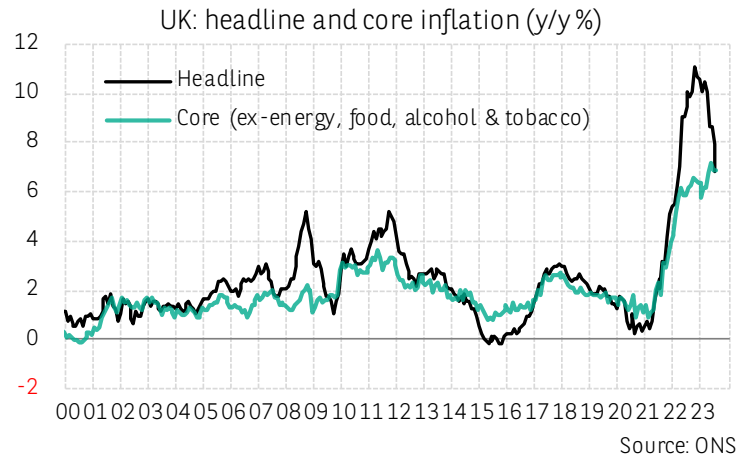
Source: Eurostat

Difference with the 2010-2019 average

Less than 0	
Between 0 and 1	
Between 1 and 2	
Between 2 and 4	
Between 4 and 7	
Greater than 7	



Inflation dynamics in the United Kingdom: different metrics and degree of generalisation



Note: the black line represents the % of CPI components whose increase is greater than or equal to 2%. The hatched green line weights the results by the share of each component in the CPI.





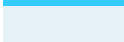
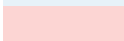


United Kingdom inflation heatmap

Difference between the current inflation rate (y/y, %) and the 2010-2019 average

	Weight (%)	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23
Total	100	7.87	7.64	7.87	8.82	8.44	8.30	7.82	8.19	7.83	6.43	6.45	5.72	4.60
Food and non-alcoholic beverages	9.3	10.96	11.43	12.91	14.60	14.77	15.17	15.04	16.40	17.51	17.40	16.66	15.68	13.19
Alcoholic beverages, tobacco and narcotics	3.9	0.70	0.75	0.81	1.39	-0.63	-1.02	0.39	0.96	0.59	4.42	4.58	4.54	4.70
Clothing and footwear	4.9	6.02	6.97	7.85	7.88	6.88	5.84	5.58	7.43	6.53	6.15	6.42	6.59	5.95
Housing, water, electricity, gas and other fuels	31.4	17.56	17.55	17.79	24.19	24.12	24.11	24.28	24.14	23.61	9.86	9.68	9.50	4.33
Furnishings, household equipment and routine household maintenance	6.3	8.32	8.32	8.96	8.81	8.92	8.08	7.43	6.94	6.31	5.73	5.78	4.80	4.51
Health	1.8	-1.21	0.03	0.89	1.62	2.20	2.50	3.70	4.23	4.53	4.42	5.72	5.54	6.30
Transports	11.1	11.84	9.09	7.66	6.01	4.31	3.57	0.21	-0.01	-2.11	-1.45	-1.72	-4.69	-4.95
Communications	1.9	0.41	-0.04	-0.37	0.44	-0.23	-0.80	-0.41	0.89	0.88	5.06	6.26	6.67	4.28
Recreation and culture	10.5	4.51	4.21	4.16	4.74	4.24	3.79	3.91	2.96	3.53	5.18	5.59	5.61	5.47
Education	2.6	-2.47	-2.47	-2.72	-3.82	-3.82	-3.82	-3.82	-3.82	-3.82	-3.82	-3.82	-3.82	-3.82
Restaurants and hotels	9.0	6.09	5.82	6.85	6.72	7.41	8.51	7.93	9.27	8.47	7.36	7.46	6.69	6.78
Miscellaneous goods and services	7.3	2.78	3.34	3.81	3.87	4.15	4.15	4.62	5.35	5.51	5.58	5.54	5.32	4.76

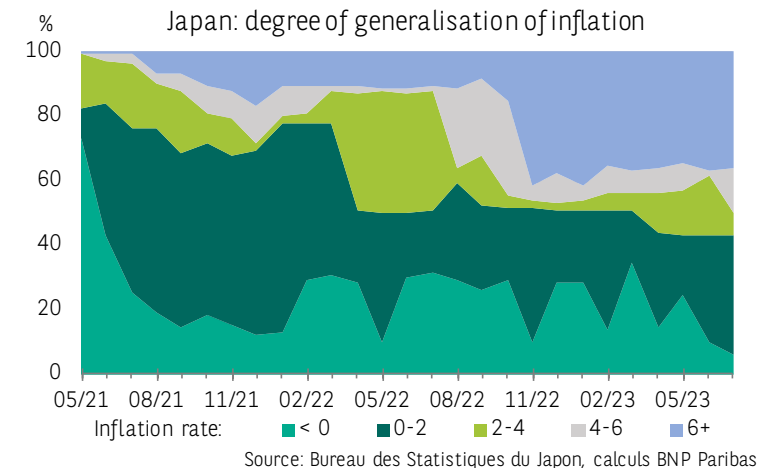
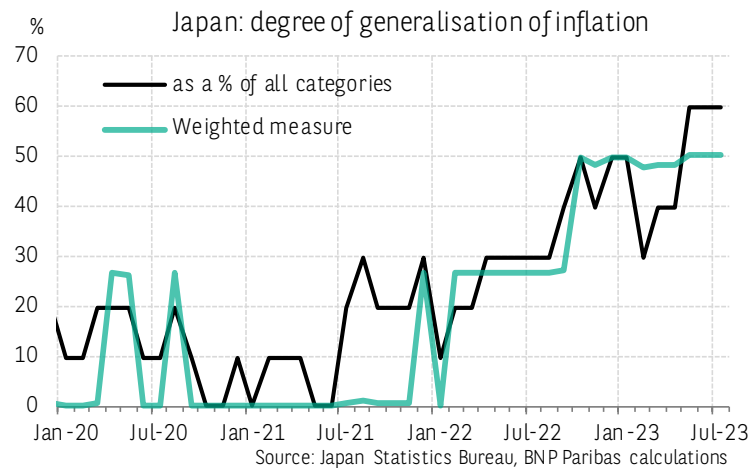
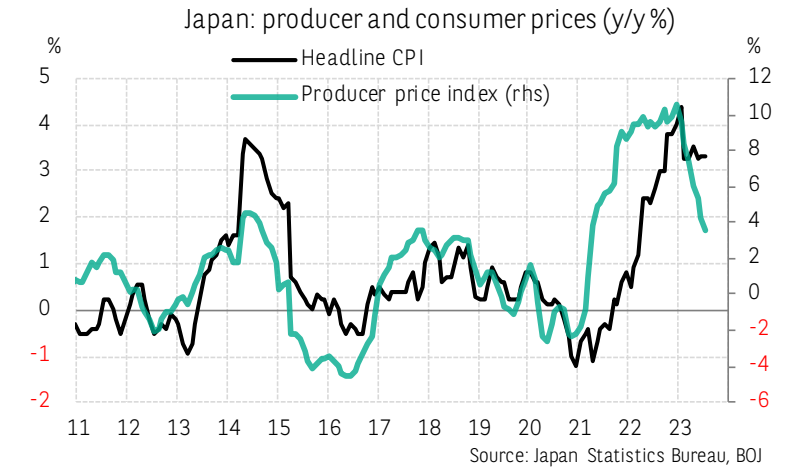
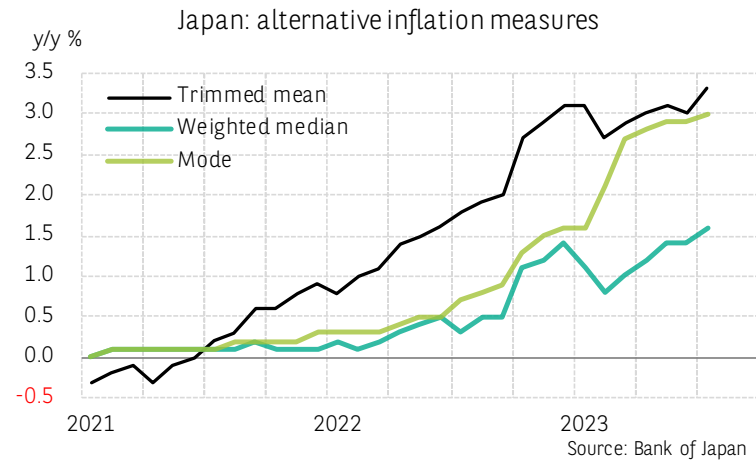
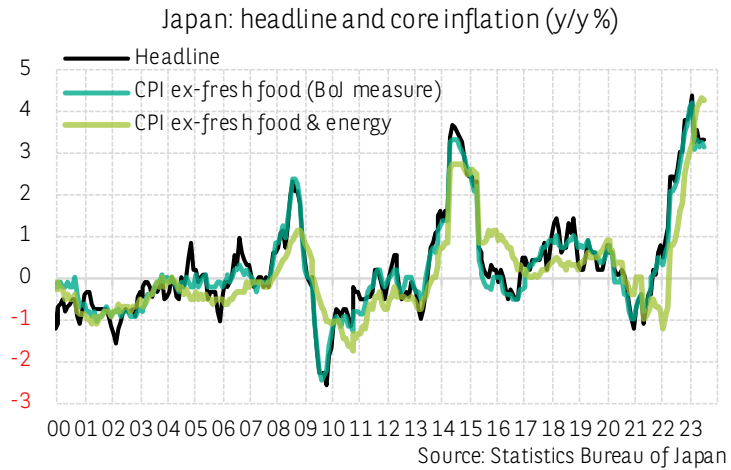
Source : ONS

Difference with the 2010-2019 average

Less than 0	
Between 0 and 1	
Between 1 and 2	
Between 2 and 4	
Between 4 and 7	
Greater than 7	



Inflation dynamics in Japan: different metrics and degree of generalisation



Note: the black line represents the % of CPI components whose increase is greater than or equal to 2%. The hatched green line weights the results by the share of each component in the CPI.



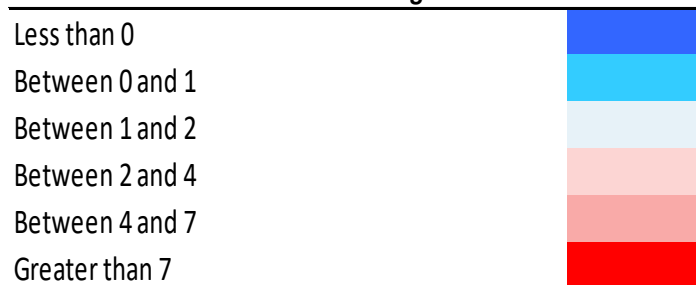
Japan inflation heatmap

Difference between the current inflation rate (y/y, %) and the 2010-2019 average

	Weight (%)	Jul-22	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23
Total	100	2.14	2.54	2.53	3.33	3.33	3.53	3.92	2.81	2.79	3.08	2.77	2.87	2.85
Food	9.3	3.37	3.55	3.09	5.20	5.89	5.89	6.30	6.48	6.66	7.40	7.46	7.25	7.70
Clothing and footwear	3.9	0.82	0.94	1.28	1.96	2.15	2.27	2.63	2.92	3.08	3.22	3.22	3.33	3.48
Housing	4.9	0.74	0.74	0.74	1.23	1.33	1.43	1.43	1.43	1.43	1.33	1.33	1.23	1.33
Fuel, light and water charges	31.4	12.98	13.86	13.21	12.93	12.42	13.40	13.23	-2.00	-4.47	-5.58	-10.06	-8.30	-11.30
Furniture and household utensils	6.3	4.87	5.36	7.65	7.84	8.31	8.48	8.60	9.62	10.39	10.99	10.57	9.57	9.43
Medical care	1.8	-0.93	-1.03	-0.83	-0.13	-0.03	-0.03	0.17	0.58	0.98	1.39	1.79	1.99	1.89
Transportation and communication	11.1	-0.68	0.17	0.28	1.70	1.26	1.69	1.80	1.37	1.14	1.36	1.90	1.79	1.87
Culture and recreation	1.9	0.67	1.54	2.06	0.77	-0.21	-0.11	1.47	1.46	2.14	2.99	3.27	3.41	4.64
Education	10.5	1.30	1.30	1.20	1.20	1.20	1.20	1.20	1.60	1.50	1.89	1.89	1.99	1.99
Miscellaneous goods and services	2.6	-0.13	0.07	-0.03	-0.43	-0.34	-0.04	-0.04	0.16	0.15	-0.04	0.05	0.25	0.05

Source : Statistics Bureau of Japan

Difference with the 2010-2019 average

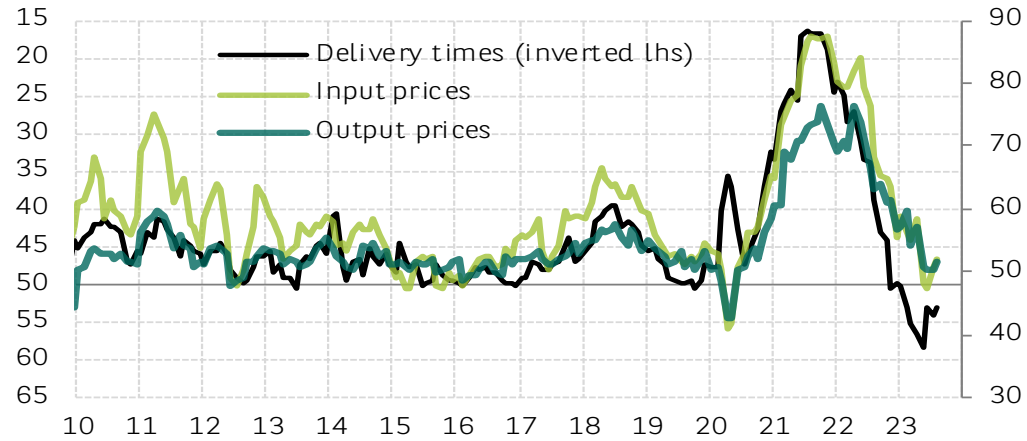


Inflation and survey data



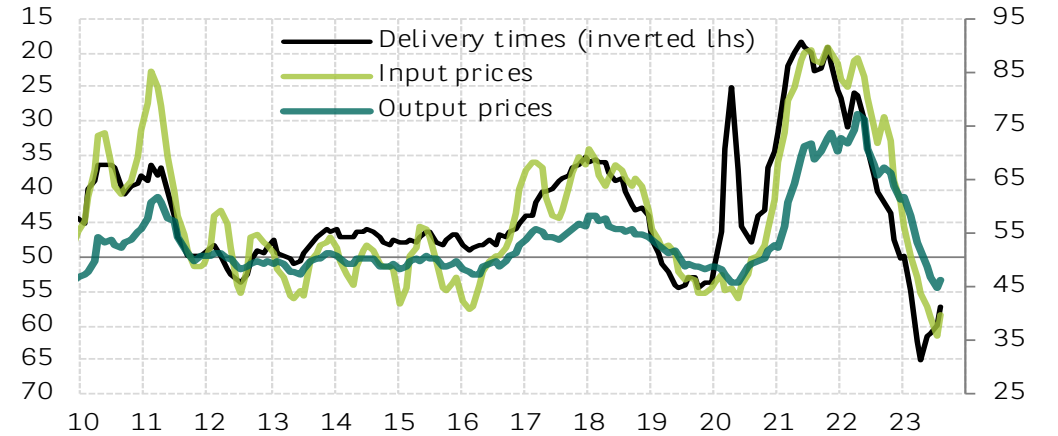
PMI surveys: an indication of inflationary pressures (1)

United States: manufacturing PMI indices



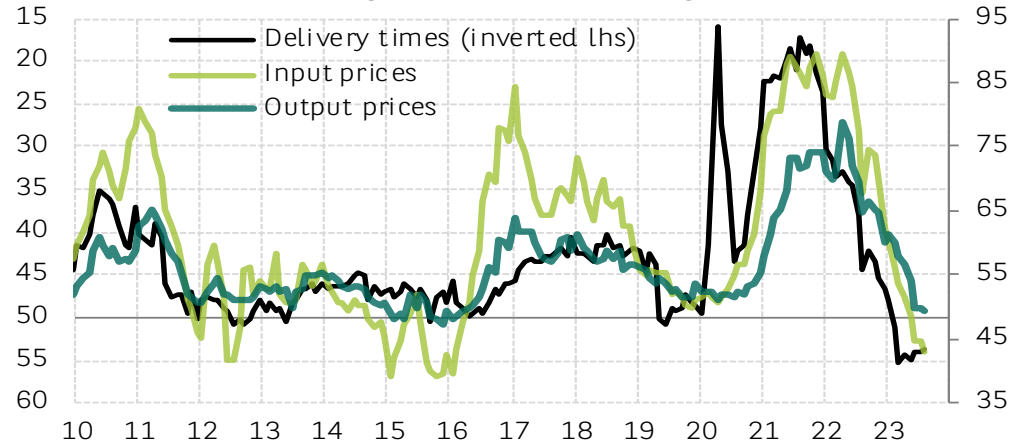
Source: S&P Global

Eurozone: manufacturing PMI indices



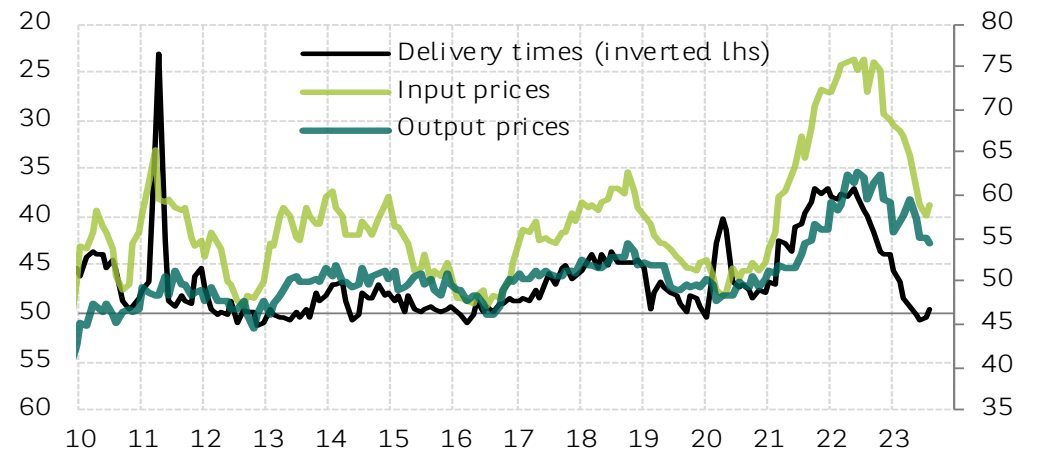
Source: S&P Global

United Kingdom: manufacturing PMI indices



Source: S&P Global

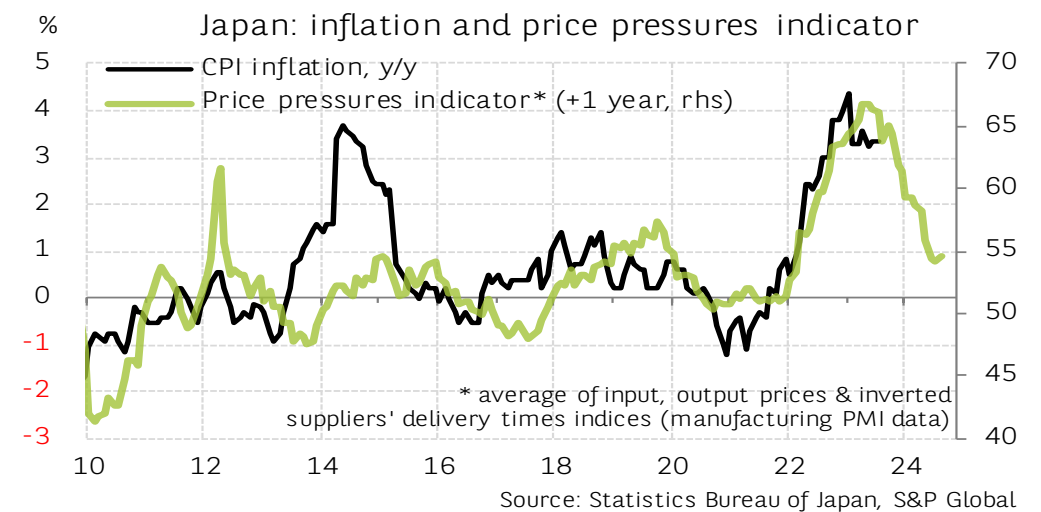
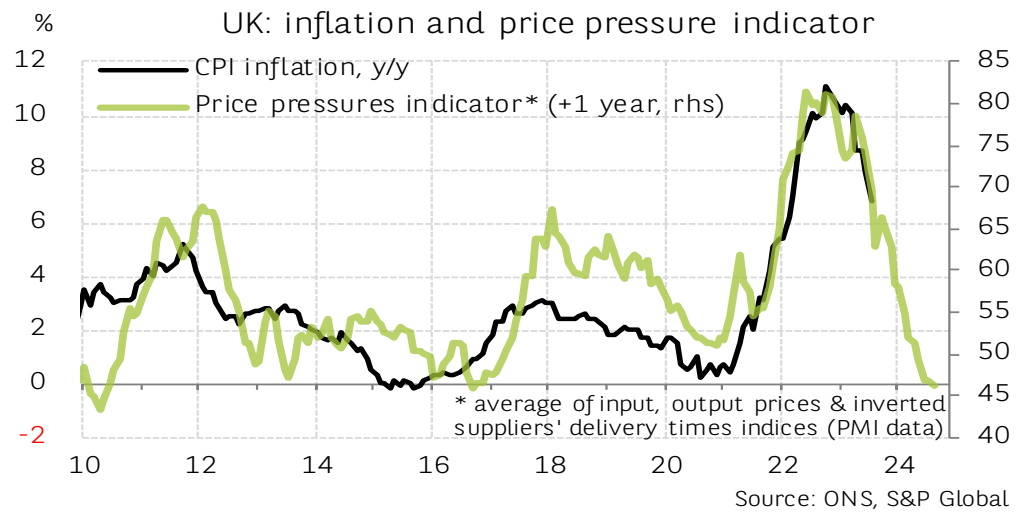
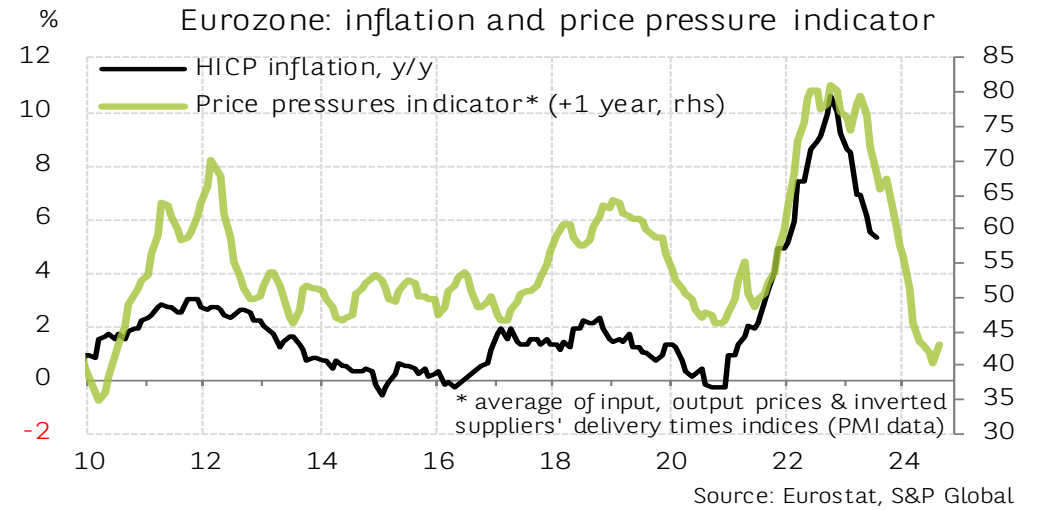
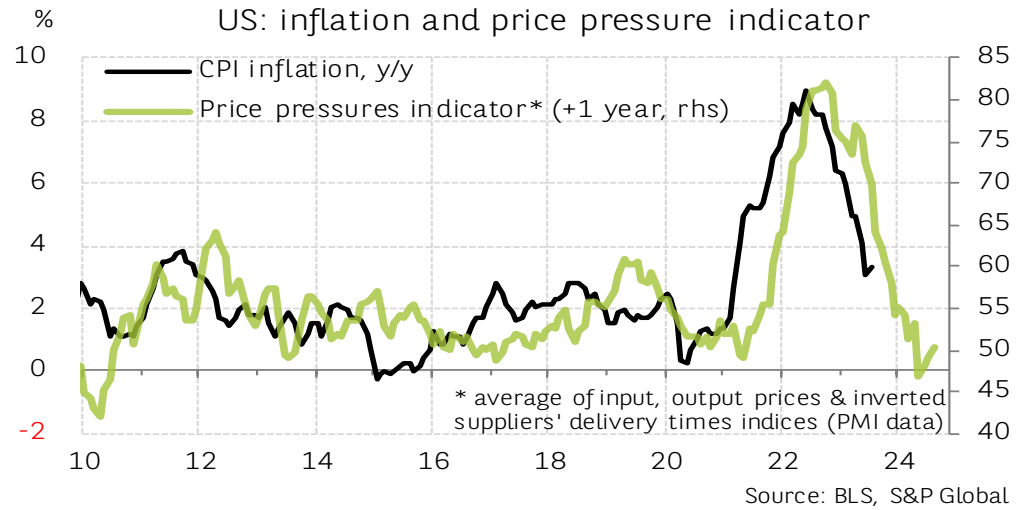
Japan: manufacturing PMI indices



Source: S&P Global



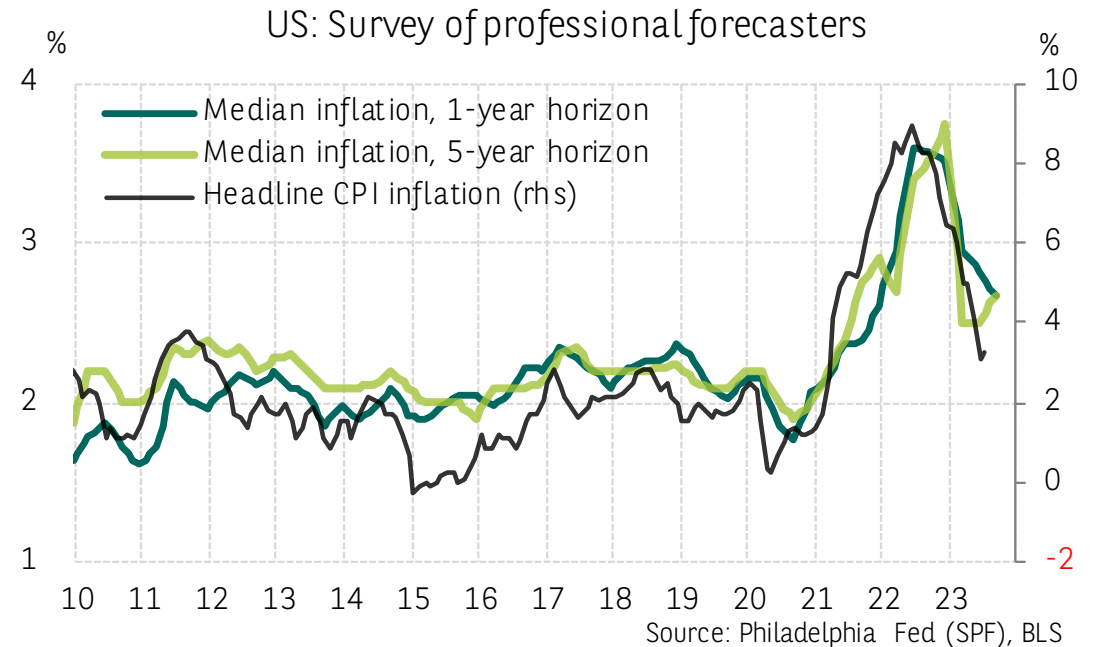
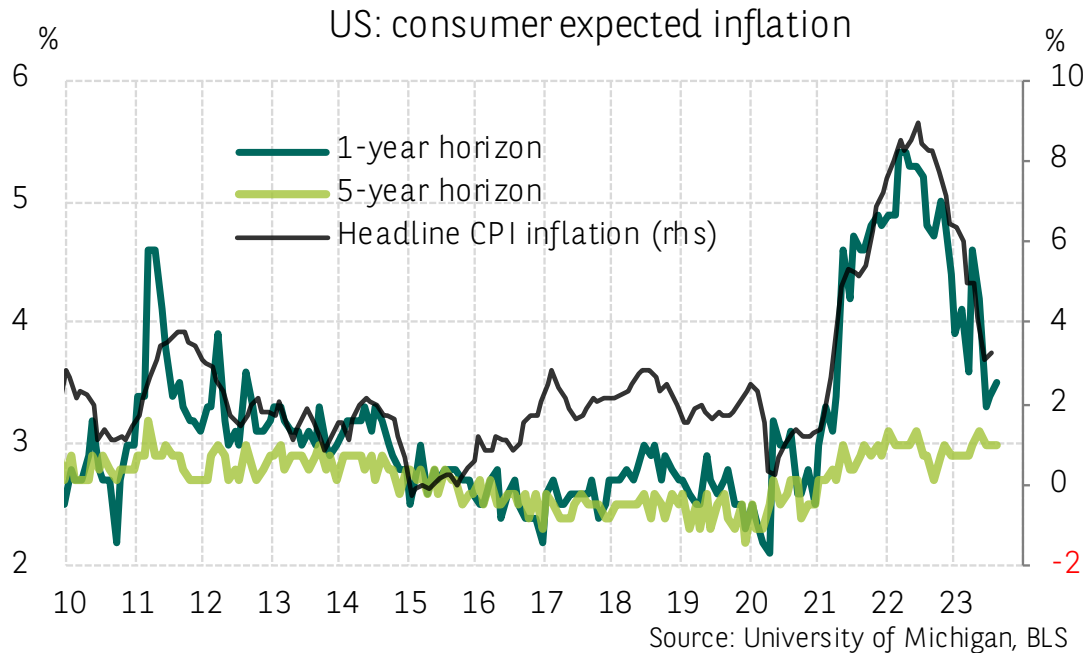
PMI surveys: an indication of inflationary pressures (2)



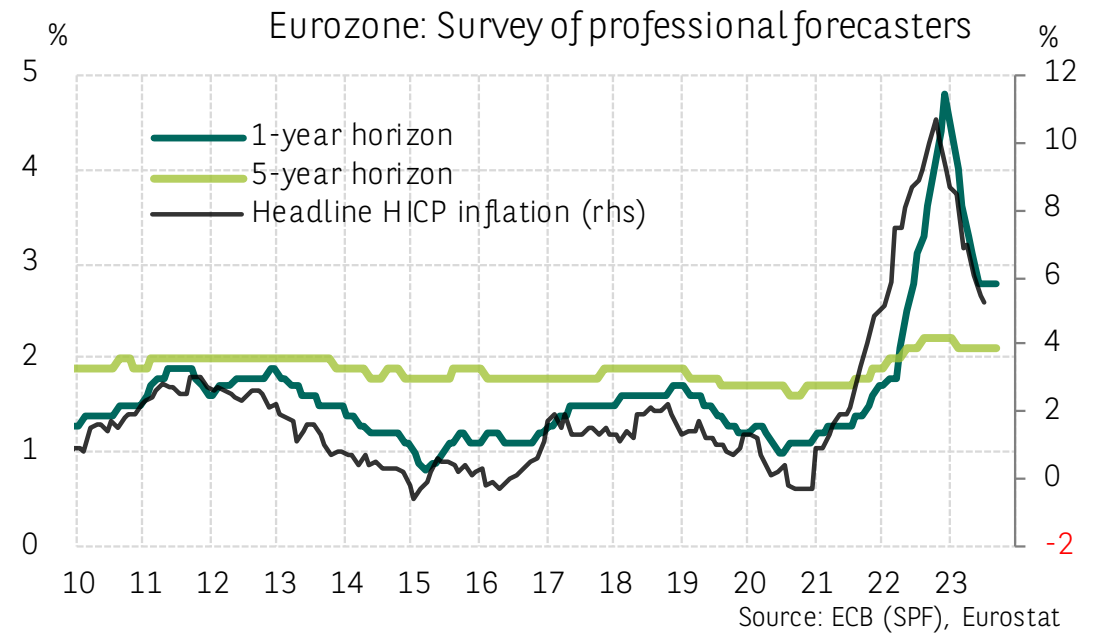
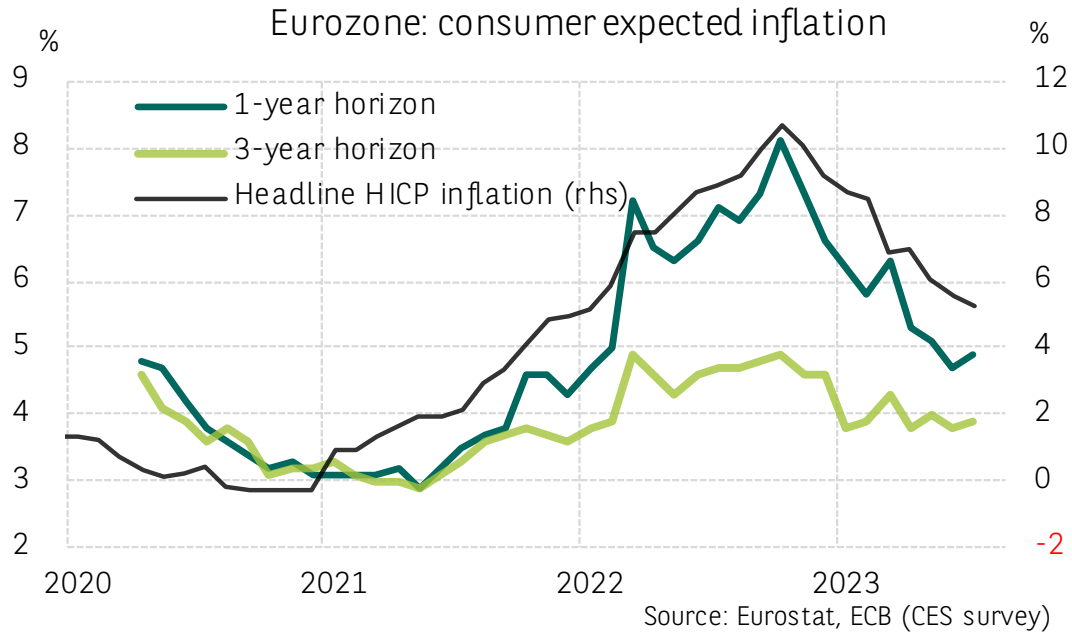
Inflation expectations (households, forecasters, markets)



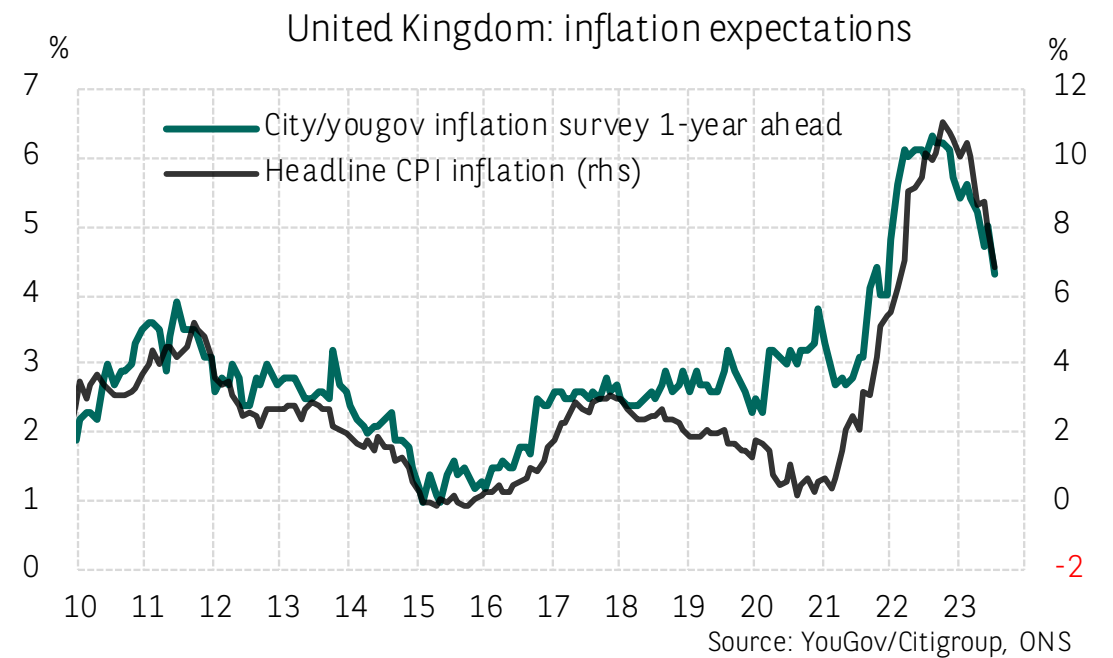
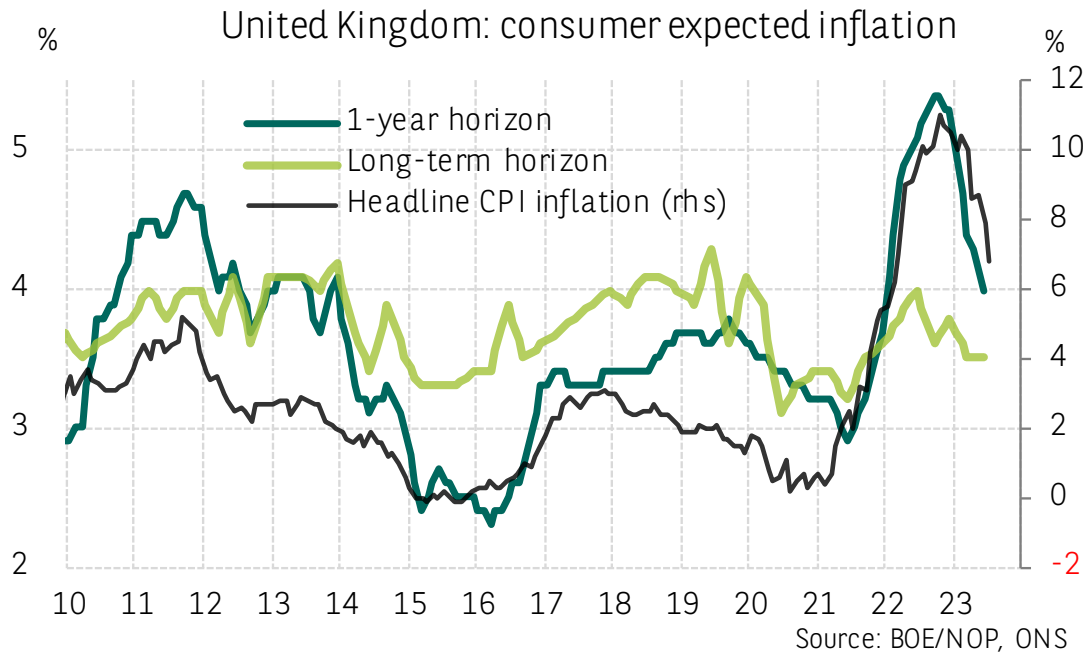
Inflation expectations in the United States



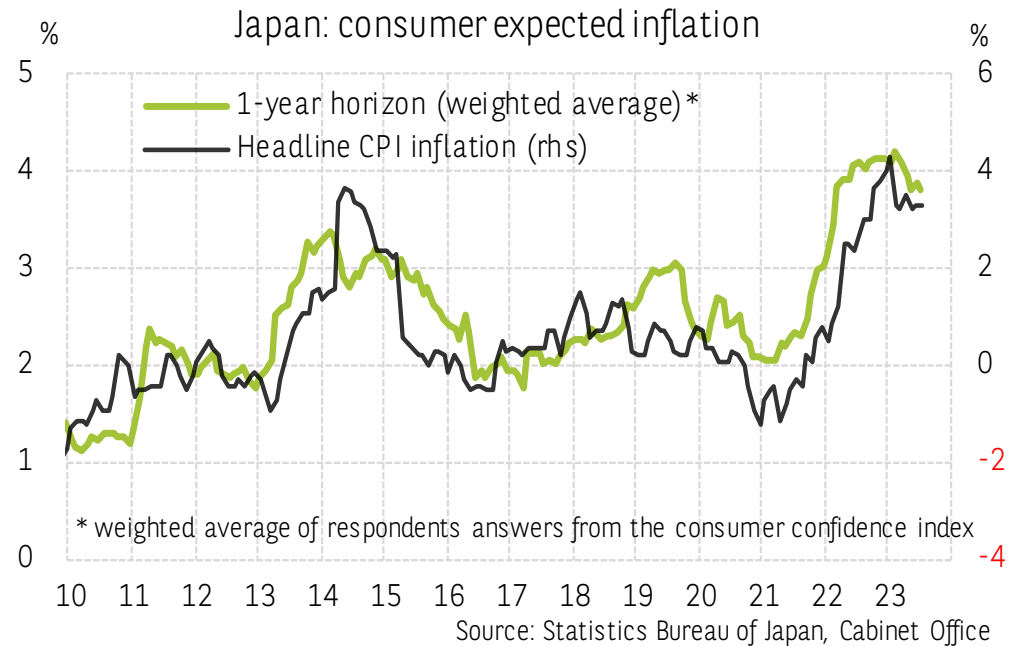
Inflation expectations in the Eurozone



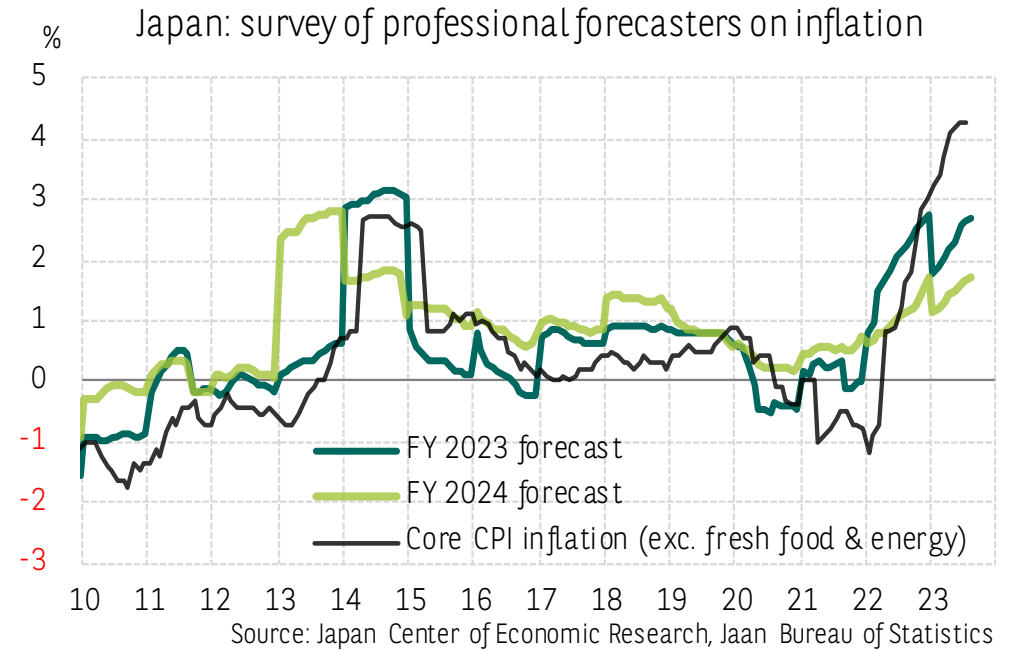
Inflation expectations in the United Kingdom



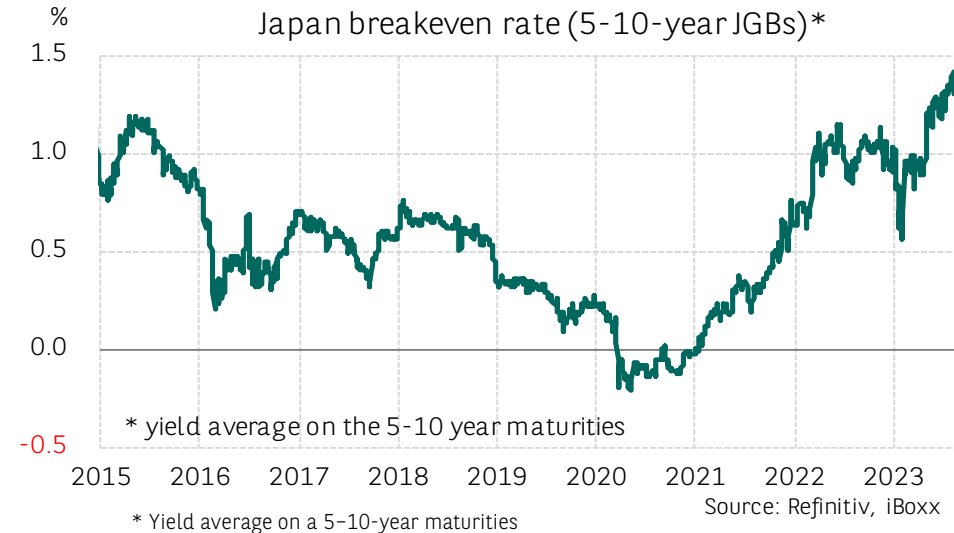
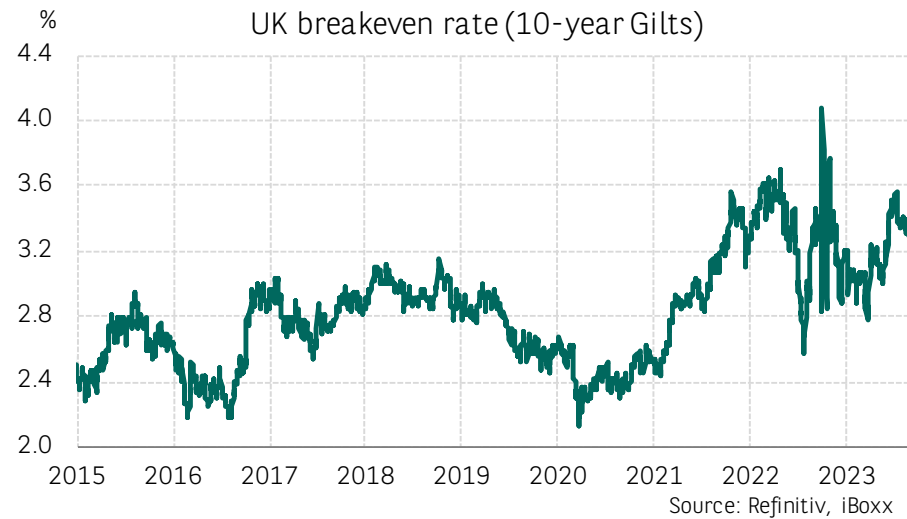
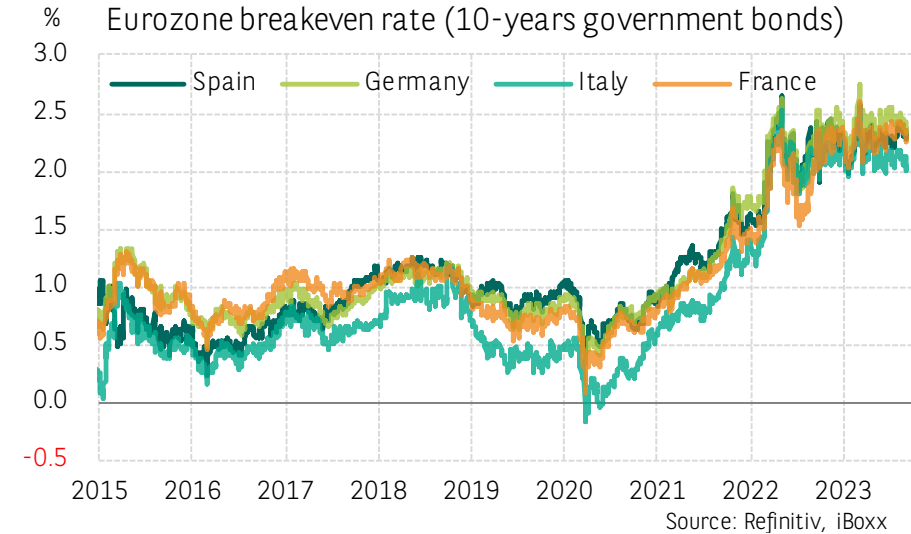
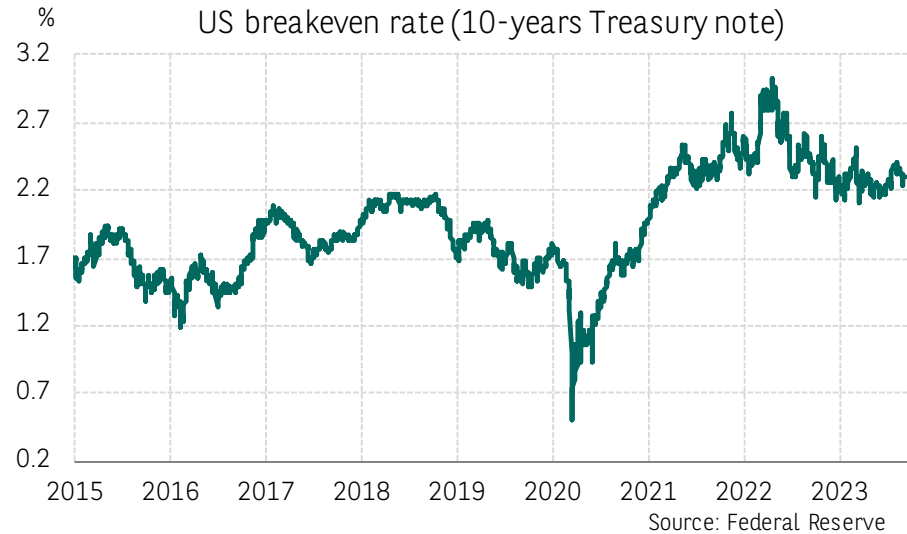
Inflation expectations in Japan



* Weighted average of respondents' answers from the consumer confidence survey (Cabinet Office)



Market Expectations: Breakeven inflation rate



Raw materials



Raw materials

WTI crude oil price, USD/barrel



Natural gas price, USD/million BTU



S&P GSCI industrial metal spot price index



S&P GSCI agriculture spot price index

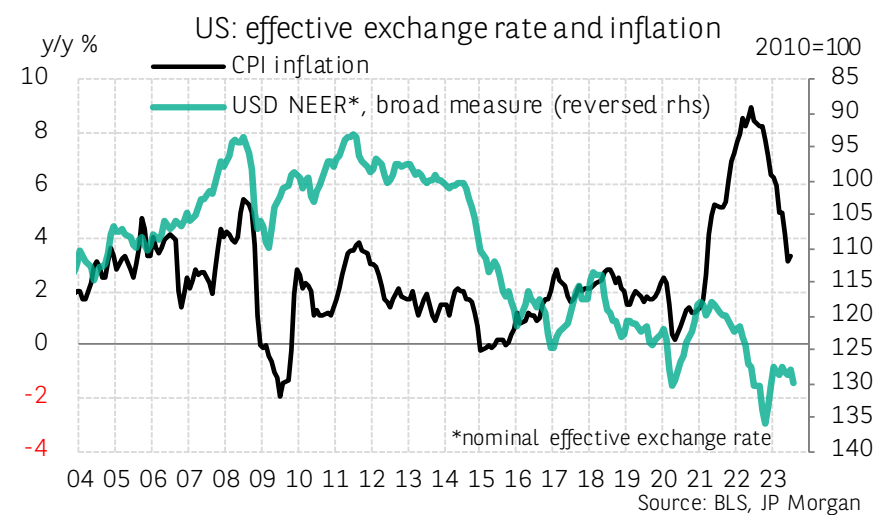
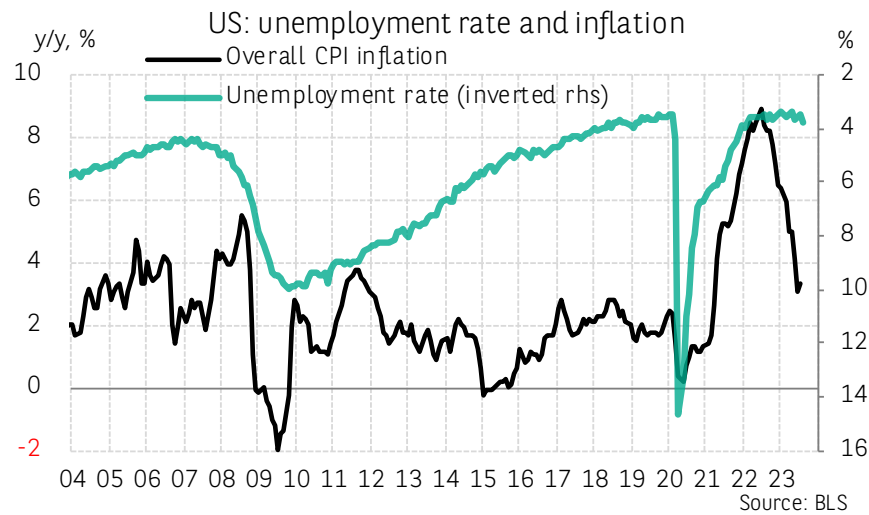
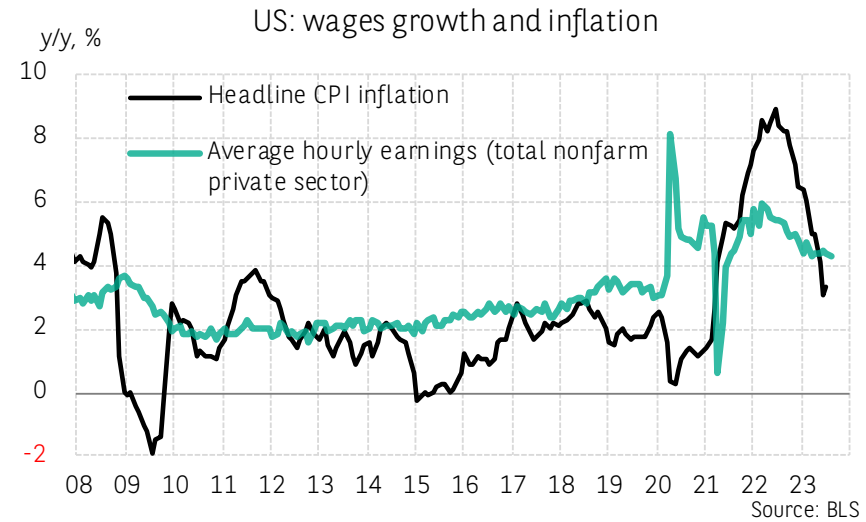
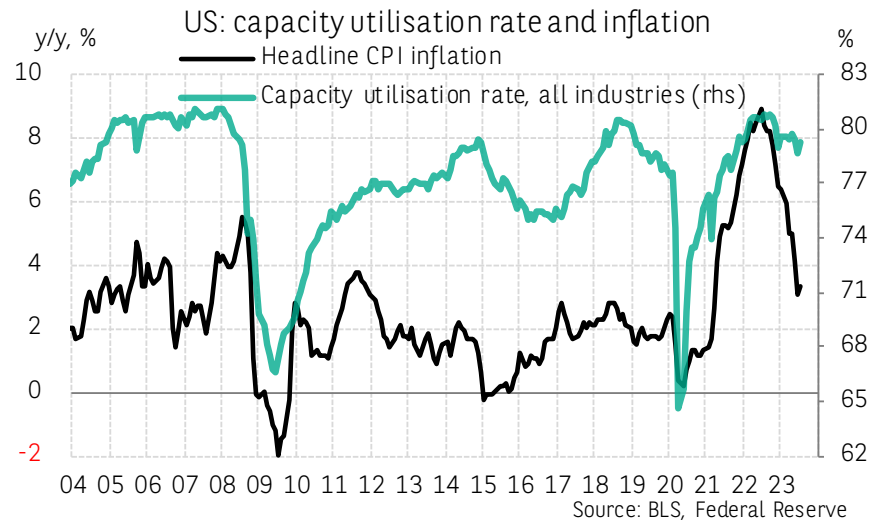


Macroeconomic determinants of inflation

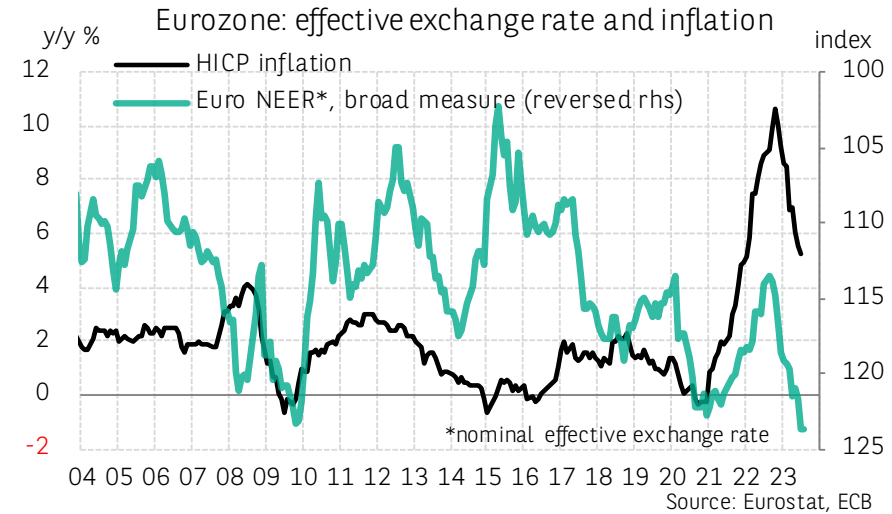
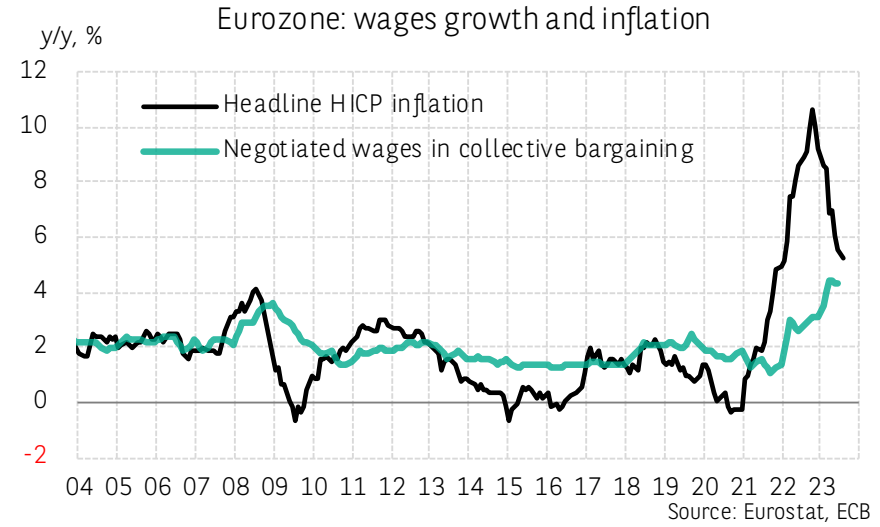
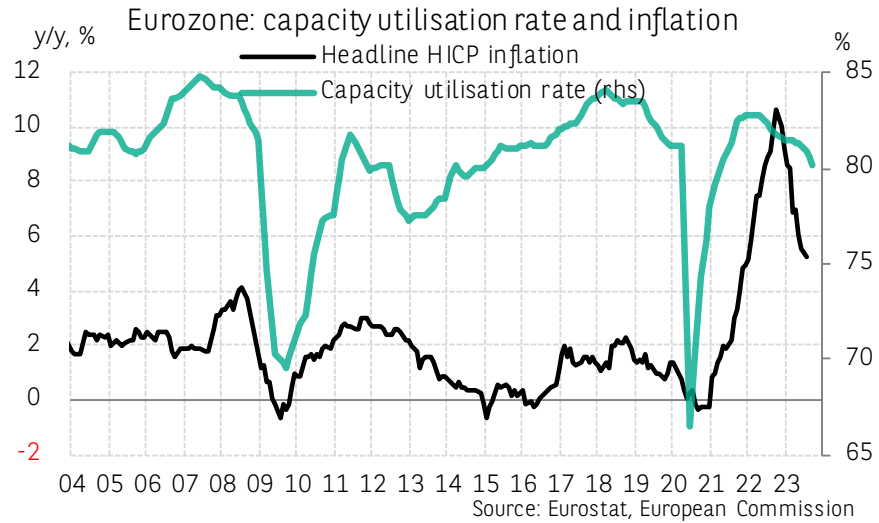
(wages, unemployment rate, capacity utilisation rate, exchange rate)



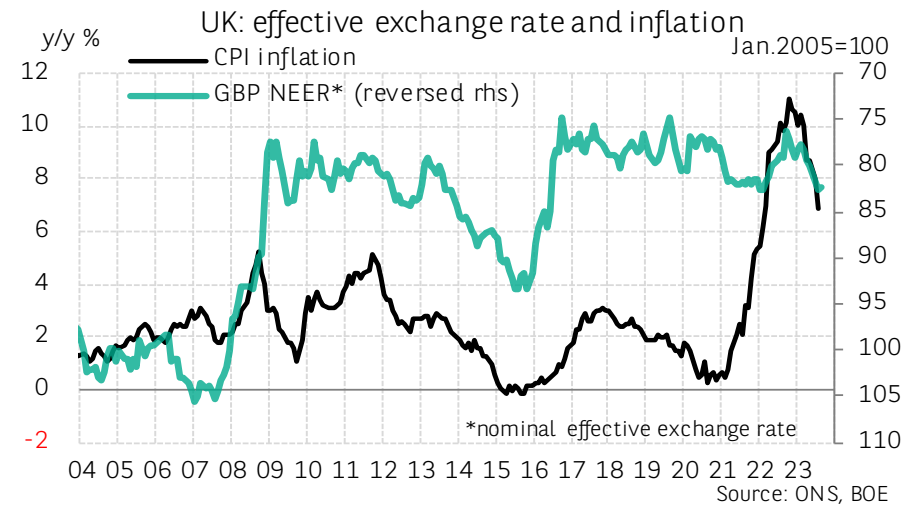
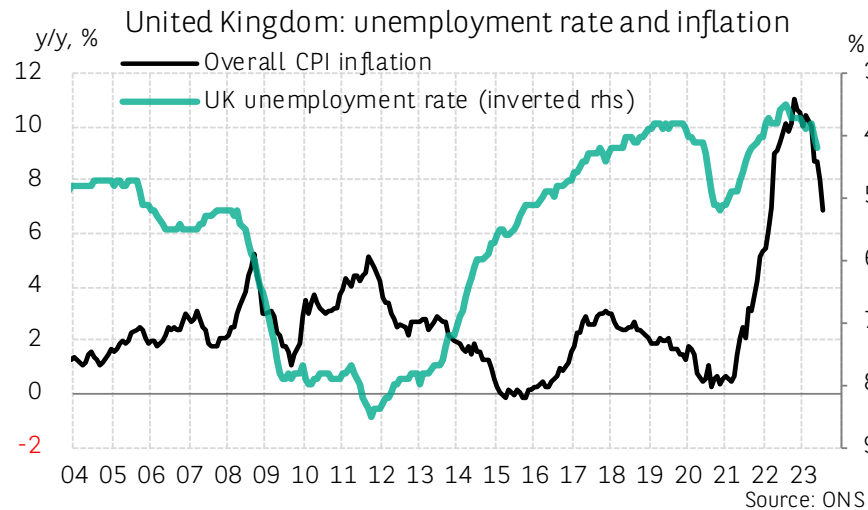
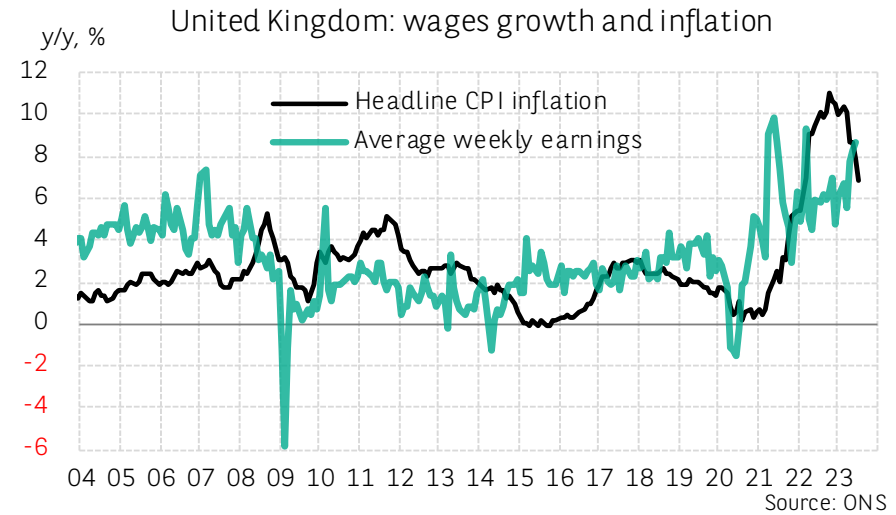
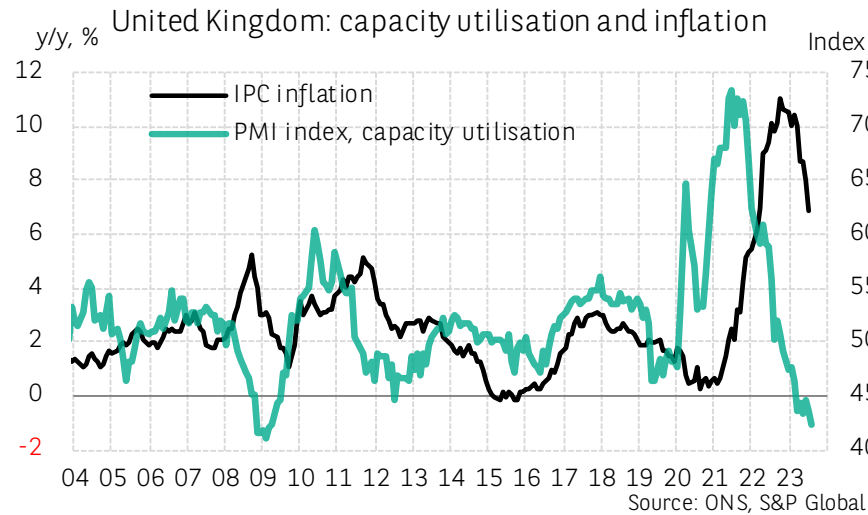
Determinants of inflation in the United States



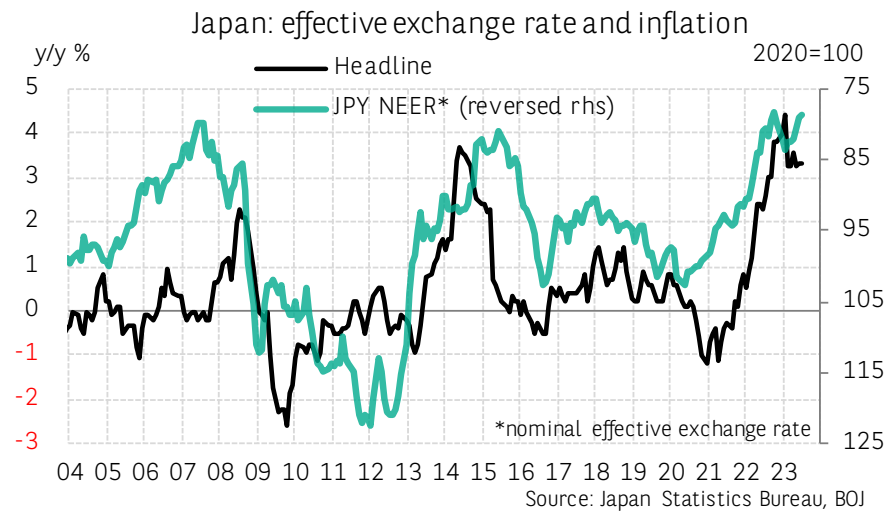
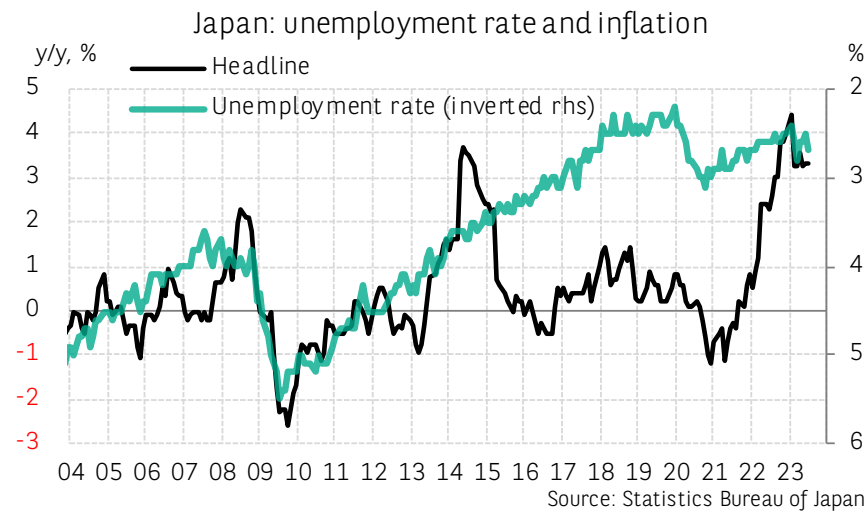
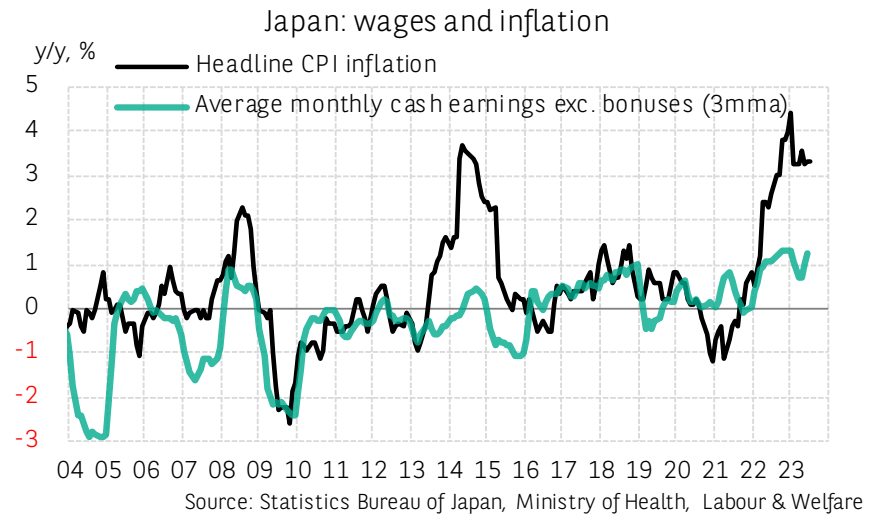
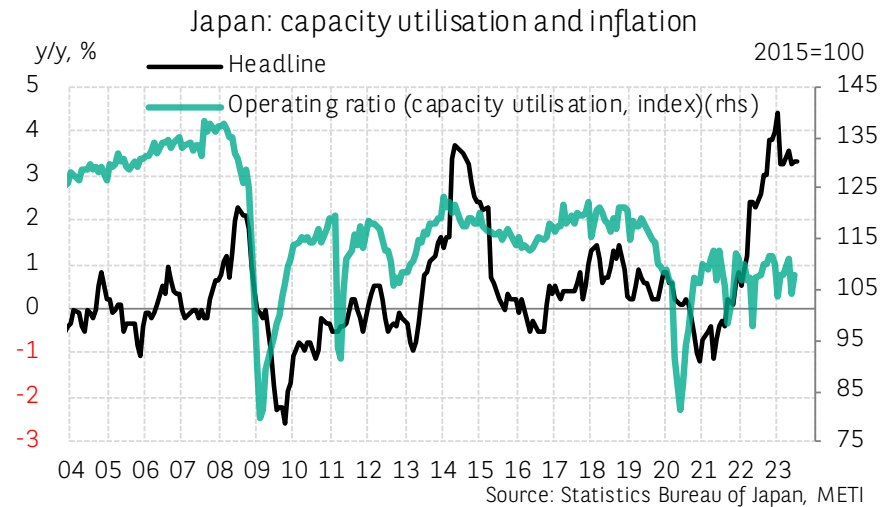
Determinants of inflation in the Eurozone



Determinants of inflation in the United Kingdom



Determinants of inflation in Japan



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